

<210> 91
 <211> 787
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (677)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (725)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (742)
 <223> n equals a,t,g, or c

<400> 91
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 cgcagatcca gctacctctg ttagccgccc gaagtacaag ttgcagaagc agcttgatag 180
 cctcacagcc aggaccccat cagaagggga ggcagggact cagaggcaac aaaagctttc 240
 ttccctccag ctggaattgt caaaactgga caaggcagcc tctcacctcc rgcagctgat 300
 ggatgagcct ccagccccag ggagcccga gctctaactc atcatcccca tcagttttcc 360
 tccctctcag acctgtcttt gaggacaaac agatttgtca gctgtcaggg tgcagtggga 420
 cgtcagagac tatgtgttcc atcgccttca ttgtgtaaat gaggacacag actggcttgg 480
 tcgcagtgac tgtggtgtcc ttgagatgct cacattactg cccggcctgc ctcccacctg 540
 gaagtctggg aatgaggaga ttgagataaa cttttgaaat cccaaacatg tctgtttatg 600
 gctctttggg cccctttgct cccagtgggt acttttgtgc ttctgagttg tcccctgaga 660
 gcttggtctg ggaaaanagg aaggaagggg tcctcactgg aggaagagga acctttctaa 720
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 acaagtg 787

<210> 92
 <211> 1657
 <212> DNA
 <213> Homo sapiens

<400> 92
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 ggcgctttgg ttccagagga ggcccaggag gagggttcag gccctttgta ccacatatec 180
 catttgactt ctatttgtgt gaaatggcct ttccccgggt caagccagca cctgatgaaa 240
 cttccttcag tgaggccttg ctgaagagga atcaggacct ggctcccaat tctgctgaac 300
 aggcatttat cttttctctg gtgacaaaaa taaacaatgt gattgataat ctgattgtgg 360
 ctccagggac atttgaagtg caaattgaag aagttcgaca ggtgggatcc tataaaaagg 420
 ggacaatgac tacaggacac aatgtggctg acctggtggt gataactcaag attctgccaa 480

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cgttggaagc tgttgctgcc ctggggaaca aagtcgtgga aagcctaaga gcacaggatc 540
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ctacagtga gattctcatt acaacagtgc caccatctc tcgaaaactg gatccagaac 660
tccatttgga tatcaaagta ttgcagagtg ccttagcagc catccgacat gcccgctggt 720
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ggattcgctt tcctggcttt gagccctca caccctggat ccttgacctg ctaggccatt 840
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gcttgcatg tctggctgca ggactgttc tgccagggtc agtgggtatc actgaccct 960
gtgagagtgg caactttaga gtacacacag tcatgacct agaacagcag gacatggtct 1020
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taaactccat agaagtgtca ttccactggg ttttgatatt ggcttagctg ccagtctccc 1440
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ataatctcca actcctgaaa acccctctct caactaatac tttgctgttg aaatgttggt 1560
aaatgttaag tgtctggaat ttttttttc taagaaaaac tattaaagta cttcctagta 1620
ggaaaaaaa aaaaaaaaa aaacycgggg gttttct 1657

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<210> 93

<211> 485

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (478)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (485)

<223> n equals a,t,g, or c

<400> 93

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ctacctrgcc tgaccagtc ggagcctgac atggtggagg gaaagggaga caagtggggc 180
tgactcgggt ccagaggcca gctaggagg aaaccgcagc tcctggggc ttgtgtgtga 240
agattcctga cttaggggtg gcttttgtt acaagatgca agaggggaaa cctgtccccg 300
actcatcgag acaacatgcc cagttatcag ggagtcctgt gtcacaagg ctgtctctgc 360
cattgtaagc aagtgccttg ggcgagctg cctctgcccc acagtctcat ctgtacaccg 420
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aaaaan 485

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<210> 94

<211> 764

<212> DNA

<213> Homo sapiens

<220>
<221> misc feature
<222> (202)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (565)
<223> n equals a,t,g, or c

<400> 94
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grtggtgga gaaccaggac cccagagagg tggggccact gaggctggtg cagttgcgct 180
cactcatcag catggcccgg angctggggg gcatcgggca taccacagca ggcccctatg 240
acggtgtgtg accaggccas cccagtggac tttctcctgc tgcacttggg gggaggggac 300
atacacacag tctcccatct ctctccctcc cccctggggg tggcccaccg catgggtaca 360
gggggttcca ggaatccaaa tccagcatgg cttggaggag ctctgttggg gagaggtcgc 420
cctgcctcac tggcaccctg ggggcacagc tggagagag gcctggccca tgctcctctc 480
agggcaggca catgtacggg gcatacaagg cacagcgcct gttggaacag gtggctgtgt 540
tcctgctctg gccccgtgc ggctngcctc cggccctgca ccagtcacat gcactggacg 600
agggccgaaa ctctgtctg ctatcgagcc ctgggtgctat gtggccccgg agccacagca 660
caatcatctc agtggcgaag cacaccaact gattctattt tttttaaca cattaaatct 720
gtttttaaag ataaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 764

<210> 95
<211> 707
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (45)
<223> n equals a,t,g, or c

<400> 95
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ccacgcgtgc catcatggcg caggatcaag gtgaaaagga gaaccccatg cgggaacttc 120
gcatccgcaa actctgtctc aacatctgtg ttggggagag tggagacaga ctgacgcgag 180
cagccaaggt gttggagcag ctcacagggc agaccctgt gttttccaaa gctagataca 240
ctgtcagatc ctttggcatc cggagaaatg aaaagattgc tgtccactgc acagttcgag 300
gggccaaggc agaagaaatc ttggagaagg gtctaagggt gcgggagtat gagttaagaa 360
aaaacaactt ctcagatact gaaaactttg gttttgggat ccaggaacac atcgatctgg 420
gtatcaaata tgacccaagc attggtatct acggcctgga cttctatgtg gtgctgggta 480
ggccagggtt cagcatcgca gacaagaagc gcaggacagg ctgcattggg gccaaacaca 540
gaatcagcaa agaggaggcc atgcgctggt tccagcagaa gtatgatggg atcatccttc 600
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aaaaaaaaa aaaaaaaggg ggcccccttt tgggggtccc ctggggg 707

<210> 96

<211> 815
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (16)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (45)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (50)
 <223> n equals a,t,g, or c

<400> 96
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 taacccccaa agaagaatcc ccccccacatt wagccttggtt aagtaaatgc ctccctgaccc 120
 caagcccgaa gatgcccccc attctctwag tgatggcggc gttagggttt gagagaagg 180
 aatttggtc aacttcagtt gagagggtgc agtccagaca gcttgactgc ttttaaatga 240
 ccaaagatga cctgtggtaa gcaacctggg catcttagga agcagtcctt ggagaaggca 300
 tgttcccaga aagggtctctg gagggacaaa ctcactcagt aaaacataat gtatcatcat 360
 gaagaaaact gattctctat gacatgaaat gaaaatttta atgcattgtt ataattacta 420
 atgtacgtg ctgcaggaca ttaataaagt tgctttttta ggctacagt tctcgatgcc 480
 ataatcagaa cacacttttt ttcctctttc tcccagcttc aaatgcaaat tcatcattgg 540
 gctcacttct aataactgca gtgtttcccg ccttgggcct gcagcagaaa aacctgacaa 600
 catagtgttt gctaaggcag taatttagac tttaccttat ttgtgattac tgtagtatt 660
 gattgattga ttactattaa ctacaaggta taatttacta tcaccttatt taaattttat 720
 gaattaattt gaatgttttt tacactaact aacttttccc aataaagtcc actatgaaac 780
 cacgacaaaa aaaaaaaaaa aaaaaaaaaa aaaaa 815

<210> 97
 <211> 658
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (627)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (634)
 <223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (635)

<223> n equals a,t,g, or c

<400> 97

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tcccgggtgat ccatgccttc cgccggggccg tggacgacct tggcctggtg ttcaaccagc 120
tgcccaagat gctgtacccc gagtaccaca aggtgcacca gatgatgcgg gagcagtcca 180
tcctgtcgcc cagcccctat gaggggttacc gcagcctccc caggcaccag ctgctgtgct 240
tcaaggaaga ctgccaggcc gtgttccagg acctcgaggg tgtcgagaag gtgtttgggg 300
tctccctggt gctggtcttc atcggtctcc accccgacct ctcttctctg cctggggcag 360
gggctgactt tgcagtggat cctgaccagc cgctgagcgc caagaggaac cccattgacg 420
tggacccctt cactaccag agcaccgcc agraggcct gtacgccatg gggccgytgg 480
ccggggacaa ctctgtgagg ttgtgaggg ggggcgcctt ggctgtkgcc agctccctgc 540
taaggaagga acagaaccac ctacatcgcc aaccctggtc cagcctraga ggaatacatc 600
ctctgatcga cctcaaatec ggagttncce cttnncttgt caaattgacc gcccaata 658
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<210> 98

<211> 249

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (248)

<223> n equals a,t,g, or c

<400> 98

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aaaatggtag acctgacagt accggtccgg caattcccgg gatatttgagc tggggttttg 60
agactscct tagagataga gaaacagacc caagaaatgt gctcaattgc aatgggccac 120
atacctagat ctccagatgt catttcccct ctcttatttt aagttatgtt aagattacta 180
aaacaataaa agctcctaaa aaatcaaaaa aaaaaaaaaa aaaaaaaaaa aaccccgggg 240
ggggcccnng                                     249
```

<210> 99

<211> 752

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (612)

<223> n equals a,t,g, or c

<400> 99

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tcgccaggcg cgcctccctg tcggtgcagg accgctactc gcccccaac gccgatggcc 120
ataaggcggt gttcgtggca cgggtgctga ctggcgacta cgggcagggc cgccgcggtc 180
tgcgggcgcc ccctctgcgg ggtcctggcc acgtgctcct gcgctacgac agcgcctggg 240
actgcatctg ccagcccagc atcttcgtca tcttccacga caccagggcg ctgcccaccc 300
acctcatcac ctgcgargca cgtgccccgc gcttcccccg acgacccctc tggrrctccc 360
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ggcgcgtccc cagacactta accgaagggg ccaccctctg gcctcctgct tcccaggctc 420
ccagctccgc acaggtgat gctccccgcc cccaactgtg gccgcctgag ctgtccccgg 480
ggasgccttg cctccctctg cgggctccag aaggcgggtg gggggatggc ggtcagcagc 540
ggccgagggg ggcggggcta ggtcccagcc tgggcccagc ccaccaccag gggtcagcag 600
agcccaggag gngacaccgy ccgcccgcg ctcccagacc tcgcccagat cggctctgtt 660
gtttgaataa acgtgaacgt gaaccaggc ggaagggacc cgggaaaaaa aaaaaaaaaa 720
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa

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752

<210> 100

<211> 3059

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (14)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (28)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (109)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3019)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3047)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3058)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3059)

<223> n equals a,t,g, or c

<400> 100

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ttctttcccc ccgtccccca actcccttct ctcgtctctt ttccccccnc ccctctccct 120

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tttctcccca tctttcacct tcctaatttc agtgaaattg gagcgatttg aaattccaat 180
caaggttcga ttaagcccag agccatggac ccctgaaact ggtttggtta ctgatgcttt 240
caaactgaaa aggaaggagc tgaggaacca ttacctcaaa gacattgaac gaatgtatgg 300
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aacctctaga attttaagcc ttgttgtaac tgtagaatg taaggatata cattctaaaag 420
atagagtaaa aagaaaacaa aacccaaaagt tattaaaatt gttgtccggg ttactttaac 480
ttagttttgc atagttctag tgcagctgaa attgaaaagt ttttccctt tagctgtgtt 540
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gaaaatatgt attaacacta ctcaaagcaa aagtgtgca gggctttaa attctcttcc 780
aaccatttat ctggaaggaa aaattcaata gtaataata acmcaaaatc aaataatacc 840
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tggtggtaat aagggaaaaa tcaagtatta taaacaagaa tgaaggtttt tgtaaaagatt 1920
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ttgtttgttc ttgtttttta gtttgactc aaatcttaag aaataaatcc acccatgtta 3000
tcaaaaaaaa aaaaaaaanc ccgggggggg gcccggaacc aaatccnccc aaggggggnn 3059

<211> 1682
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (52)
 <223> n equals a,t,g, or c

<400> 101
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 tccaccagac gtctcctaag acagagtttag agtcaacaat ctttggcagt ccgaggctgg 120
 ctagtgggct cttcccagag tggcagagct gggggagaat ggagaacttg gcctcttatac 180
 gatgaattaa gcaacaatgt aactgggtctt gacttgatcat attcccccat gcaatcctag 240
 gtctgtattg ctcaatttta ggaagccttt gctactccat cagtaggttt agatttgagc 300
 ttttgagacc tggtcatgga aaagaaagac acttgagaat ttagtggttg ggtctgtaca 360
 gatgatgcta cccaatttgg ctttgaagga tcaagtaaca ggttgaaaac tatttttata 420
 aaggtaatac tttttcagtt cccttcttcc ttccctctca atccactagc tttcatgttg 480
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 tgatcattgt tgggtgaaaa acgtaagggtt attttgtgtt ttttaagttgg ttttacaatt 660
 ctttcttggg gaaattattt ctggaggggga aaaagatcca ttctacgtat ccttgtggag 720
 aaaagctaaa taacctttta gaatgtgggt ggtatttgag aaagaagatg aattatagct 780
 ccggagaatc aagatcttaa gtgaagcctt tctgttcaga tgtgatctat aaaaaatcat 840
 aatttgggga aagtttaagc aaatctggct ttgtagtcct gatgttataa gtgactttgt 900
 gatcaaaactg tcaggcttgg gttcttggtta tagaatgctt ggtatagaaa aaccatgcc 960
 tcattaatgg ctaacaacac gtagggactt catgtcatgt caaagatagc tctttgcaag 1020
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 aataatgttg tatctttgag accgttgtca gtgtacacaa ctcacatcct tcatattgaa 1200
 ggtgactcat ttttctgcac acttttttga tgtgatgctt gacgtgaggc ccgacactag 1260
 gattctcaat gcaagaatcc agtaccttgc acatagaagt agcaacccat cccttgccata 1320
 ttttcatctt gctgttttct tttttttaa aaaatggatg tgacttggtt tgaatgtttt 1380
 gtattatact tgtttttgtg tgtgcataaa ttcattctgt aggatcttaa gaaaaagagt 1440
 ccgagaatgt tgcttctatt attgtgcaca accattgaga ggtgttataa gaatgcagtt 1500
 aattttaaca tgtgtgatgt gccatgggtg aaaagtacta tcggaataaa tctgcagtga 1560
 cagaatttga agtttggtga gcatccatac ttttctactg taaatatttc actctcctct 1620
 agctatcctt gatgagcttc tcactttaag aataaatgtg tttgatataa aaaaaaaaaa 1680
 aa 1682

<210> 102
 <211> 938
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (30)
 <223> n equals a,t,g, or c

<220>

<221> misc feature
<222> (812)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (913)
<223> n equals a,t,g, or c

<400> 102
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cgagtccgac tccctcaagg gtgacgcgag ctctgccctt taaccggaaa cgtctccctg 180
ctacccccac ccccgcgag acgcagtgtc gagcacacag ctaccggaca aagagtgtacg 240
cccggagctg gagttatggc ggctacggag ccgatcttgg cggccactgg gagtcccgcg 300
gcggtgccac cggagaaaact ggaaggagcc ggctcgagct cagcccctga gcgtaactgt 360
gtgggtccct cgctgccaga ggctcaccg cctgcccctg agccttccag tcccaacgcc 420
gcggtccctg aagccatccc tacgccccga gctgcggcct ccgcggccct ggagctgcct 480
ctcgggcccgc caccgtgag cgtagscctc aggccgaagc tgaagcgcgc tccacaccag 540
gccccgcggg ctctagactc ggtcccgaga cgttccgcca gcgtttccgg cagttccgct 600
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ggctgcggcc tgacatccgc accaaggagc agatcgtgga gatgctggtg caagagcagc 720
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gcatcactgg ctgagcgggtg gagctgcggg cngccagggc cgggcgctct gtgcggactg 840
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<210> 103
<211> 2012
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1993)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2002)
<223> n equals a,t,g, or c

<400> 103
gctggataat tccagcctgt tagctactca caggaacatg cagaattatt ggctccaggg 60
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tctctttccc agaacaatct ggagtttgcc agaaaactct gtaaacagga gtcgtgctgt 180
gtgtgaactg taaactcttc tctccaggcg tcgaggggac ctttgcttta ctttgagct 240
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gmtagctctt tgttttacgt gtttcattkg gcaggtcaca aaggctcttg gctaccacac 420
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aggtttttaa attcagtttc ttttctgggg atttaacatg gaaggacttg gagggcaaat 660
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atccttttct catgttttta ttaaagatat atgcaagttg ccgaaagacg aaggaacttg 1020
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aaagtgttaa tagagaatat ttttggcatt cctctaagt tgtgtgtttt tttttttgt 1860
gtgctggagg gaggggattt aattttaatt taaaatgtt taggaaattt atacaaagaa 1920
actttttaat aaagtatat gaaagttaa aaaaaaaaa aaaaaaaaa aaaaaaaaa 1980
aaaaaaaaa aaaaaaaaa aaaaaaaaa aa
2012
```

<210> 104

<211> 1094

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (26)

<223> n equals a,t,g, or c

<400> 104

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ggctgggggg caggtgttgc ttccggcccc gccctccggc cggcgtgtgc gagtgcgccc 180
ctggctgtga gtgttgaccg ttctctctcc ctgtacatag cmcgagccag tcctgagtgg 240
gtgactcctg agtgggtgac gcgcagacgg gatttctcag gtcatttcta tggctcgacat 300
gatggctgct gctttggctg ccaccacccc cgggcccagc ctgtctgaaa ttcaggggtt 360
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ctggggtgca ctttagtttg gggcgggacg ggagccgcg ttgtgactgg cgtggtctgg 480
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ggctctgact cggtcccta ctccctgcac ccagctgggc gacttgggg cctgcggtct 600
gaatgtatcc ctccctcag ttttaacctg agctgccgaa cgcacagtgg gccggggggc 660
aggctggggg aagcggggcc caattacgga tcccgaggat tacaggtgcc gacgtgatgt 720
cgcttctctg gtgcccagct cccttctctg tctgagacta gctctggggg tggcgggggc 780
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ccccamacgc tgcctccgct ccaccctgcc cgtgctgctg ctctgtgcct gctgtcagag 840
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ttgctggagag ccgcttatgg gtgtggtccg tccagacacc ttgtttcaag ggggatgggc 960
gtgagcgggc aagcagagca tccccaccgc tgagcaagaa ctttttcttg tttttaaacc 1020
atcacgtcct catttcacat tggaataaag tgagtttttg aaacctgcga aaaaaaaaaa 1080
aaaaaaaaaa attc 1094

```

<210> 105

<211> 2297

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (30)

<223> n equals a,t,g, or c

<400> 105

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tcttcgacca tctgcctaata tccttcctca cagtctgtag ccactctgata tcctagggga 120
aaaggaaggc caggggttca catagggccc cagcgagttt cccaggagtt agagggatgc 180
gaggctaaca agttccaaaa acatctgccc cgatgctcta gtgtttggar gtgggcagga 240
tgagaaacag tgcctgtttg ggggaaaaca ggaaatcttg ttaggcttga gtgaggtgtt 300
tgcttccttc ttgccagcgc ctgggttctc tccaccaggt aggttttctg ttgtggtccc 360
gtgggagagg ccagactgga ttattcctcc tttgctgac ctgggtcaca cttcaccagc 420
cagggctttt gacggagaca gcaaataagg ctctgcaaat caatcaaagg ctgcaaccct 480
atggcctctt ggagacagat gatgactggc aaggactaga gagcaggagt gcctggccag 540
gtcggctctg actctcctga ctctccatcg ctctgtccaa ggagaaccgc gagaggctct 600
gggctgattc agaggttact gctttatatt cgtccaaact gtgttagtct aggccttagga 660
cagcttcaga atctgacacc ttgccttgct cttgccacca ggacacctat gtcaacaggc 720
caaacagcca tgcatttata aaggtcatca tcttctgcca cctttactgg gttctaaatg 780
ctctctgata attcagagag cattgggtct gggaagaggt aagaggaaca ctagaagctc 840
agcatgactt aaacaggttg tagcaaagac agtttatcat caactctttc agtggttaac 900
tgtggtttcc ccaagctgca caggaggcca gaaaccacaa gtatgatgac taggaagcct 960
actgtcatga sagtggggag acaggcagca aagcttatga aggaggtaca gaatatctct 1020
tgcgttgtaa gacagaatac gggtttaatc tagtctaggt accagatttt tttcccgctt 1080
gataaggaaa gctagcagaa agtttattta aaccacttct tgagctttat cttttttgac 1140
aatatactgg agaaactttg aagaacaagt tcaaactgat acatatacac atattttttt 1200
gataatgtaa atacagtgc catgttaacc taccctgcac tgctttaagt gaacatactt 1260
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taacaagaca aacttatgat aaagtatttg tctttagat caggggtttg ktttgktttt 1440
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aagatctagt ccaatctttt tctagagaaa aagataatct gaagctcaca aagatgaagt 1620
gacttcctca aaatcacatg gttcaggaca gaaacaagat taaaacctgg atccacagac 1680
tgtgcgcctc agaaggaata atcggtaaat taagaattgc tactcgaagg tgccagaatg 1740
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cacaacata agaaactggc ttctacactt tctctgaatc atttaggttt aagatgtaag 1860
tgaacaattc tttctttctg ccaagaaaca aagttttgga tgagctttta tatatggaac 1920
ttactccaac aggactgagg gaccaaggaa acatgatggg ggaggcagag agggcaagag 1980

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taaaactgta gcatagcttt tgtcacggtc actagctgat ccctcaggtc tgctgcaaac 2040
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aacagtttgc ccaggaactg ggggatcata tatgtcttag tggacagggg tctgaagtac 2160
actggaattt actgagaaac ttgtttgtaa aaactatagt taataattat tgcattttct 2220
tacaaaaata tattttggaa aattgtatac tgtcaattaa agtggttttg tgtaaaaaaa 2280
aaaaaaaaa actcgta 2297

<210> 106

<211> 442

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (419)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (423)

<223> n equals a,t,g, or c

<400> 106

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tatttgcmtc gtttttcttg cttgttttcc ccccgttaga ctttgcggg agagcgcggt 120
tatgggcccgc aagaagaaga agcagctgaa gccgtggtgc tggtattgta atagagattt 180
tgatgatgag aagattctta tacaacacca aaaagcaaaa cattttaaat gtcataatatg 240
tcataagaag ttgtacacag gacctggctt agctattcat tgcatgcagg tgcataaaga 300
gacaatagat gctgtaccaa atgcatacct gggagaacag acatkgattg gaaatatatg 360
gtatggaarg tattccagaa aaagatatkg atgaaagaag acgacttctt ggaacagana 420
acnccagaga gtccaaaaaa ag 442

<210> 107

<211> 1019

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (995)

<223> n equals a,t,g, or c

<400> 107

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cgacggctcg agtgcggatg gggccgcggg gcgccaggc gctctggcgc atgccgtggc 120
tgccggtggt tttgtcgttg gcggcggcgg cgccggcggc agcggcgagg cagcaggtcc 180
cgctggtgct gtggtcgagt gaccgggact tgtgggctcc tgcggccgac actcatgaag 240
gccacatcac cagcgacttg cagctctcta cctacttaga tcccgcctg gagctgggtc 300
ccaggaatgt gctgctgttc ctgcaggaca agctgagcat tgaggatttc acagcatatg 360
gcggtgtggt tggaaacaag caggacagcg ctttttctaa cctagagaat gccctggacc 420
tggccccctc ctacttggtg cttcctgccc tcgactggta tgcagtcagc actctgacca 480

```

cttacctgca ggagaagctc ggggccagcc ccttgcatgt ggacctggcc accctgcggg 540
agctgaagct caatgccagc ctccctgctc tgctgctcat tcgcctgccc tacacagcca 600
gctctggtct gatggcaccg aggaagctc tcacaggcaa cgatgaggtc atcgggcagg 660
tcctgagcac actcaagtcc gaagatgtcc catacacagc ggccctcaca gcggtccgcc 720
cttccagggt ggcccgatg gtagccgtgg tggccggagg gctaggctgc cagctgctac 780
aaaaacagcc agtatcacct gtgatccatc ctccctgtgag ttacaatgac accgctcccc 840
ggatcctgtt ctgggcccac aacttctctg tggcgtaaca ggaccagtgg gaggacctga 900
ctccctcac ctttggggtg caggaactca acctgactgg ctccctcttg aatgactcct 960
ttgccagcty tcaactgacct atgaacgact ctttngtacc acagtgacat taaagttat 1019

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<210> 108

<211> 711

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (642)

<223> n equals a,t,g, or c

<400> 108

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cttgaaaact tagtttacta tacatcttgc cctattaata tggttctctta acgtgtgcc 60
ttgttctctt tgaccatttt cctataatga tgttgatgtt caacacctgg actgaatgtc 120
tggtctcaga tcccttggtg gttacagatg aggcagtctg actgtccttt ctacttgaaa 180
gattagaata tgtatccaaa tggcattcac gtgtcactta gcaaggtttg ctgatgcttc 240
aaagagctta gtttgyggtt tcctggacgt ggaaacaagt atctgagttc cctggagatc 300
aacgggatga ggtgttacag ctgcctccct ctcatgcaa tctggtgagc agtggtgagc 360
gcggggagcc agagaaaact gccagttata taacttctct ttggcttttc ttcactctga 420
aaacaaggat aatactgaac tgtaagggtt agtggagagt ttttaattaa aagaatgtgt 480
gaaaagtaca tgacacagta gttgcttgat aatagttact agtagtagta ttcttactaa 540
gaccaatac aaatggatta tttaaaccaa gtttatgagt tgggtttttt cattttcyat 600
ttgtatttta ttaagagtgc ttttcttatg gtgatttttt tnaattgcga tttgatatgg 660
tttgccata tggccccacc caaatcccca tcttgatta taatccccat g 711

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<210> 109

<211> 743

<212> DNA

<213> Homo sapiens

<400> 109

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tcgagttttt tttttttttt ttttactttt taaaatttta ttgatgtacc acctgatcaa 60
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atttcatatt atataattct gcttattctt tcaaaaattt atacatccat tgggcaagga 180
atgggttttca ttaaattacc aatattaaat gcacttaatc attgtgtata gggttaaacca 240
aagtaactat taactaactt ttaggcattt taaggaggta aaacatacat tttacacata 300
aatatttgat gcaaataatg agataaaatt ttttaaaaat tagaacactg agtaaaacac 360
ctttgataga ttatattgtt ttgttttgag agcaaggatt tccagatatg ttcattcttt 420
aaaacactca gctttgggtt ctttgtttcc caaactgcaa agctgctgat aacaaaactc 480
caggattcca tgtgagtcca gctatgtcta ctttaacaca aatattaaaa cagaattcag 540
raaatgcagt attaaggatc cagcttctat tgaaaccaat atccatttgc atcataacaa 600
caaacatttg aatgagatgg tcacacttgt acttatcagc aggttccttt aataacaaag 660

```

actactaaat gtatatacctt aatcacaaaa gaacaacaaa aaaaatacag gttttttttt 720
 ttccatttcg tacaaaagtc acc 743

<210> 110

<211> 795

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (645)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (737)

<223> n equals a,t,g, or c

<400> 110

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 tatttgtatt acaaagaact tgaaatttac tttcttagtt gattatatta aatgatgtat 120
 atattatatg tggtttataa gctcaacact ggccattttt ttagttttat tgtaaattgg 180
 tatttttcta tgtttaatta taatagatct ggctttttct ggatagcata aagatcactg 240
 aactatatat atataagara caagagttct atttttagcac aaaggcattt tatattattt 300
 attgaatcca taagtttggt ttcgtcaaaa acattccata ttattttctgc tcctttttat 360
 ttgtatagtt tgttatttaa agaaatggca gtccttcctg ttcttaatac aataaaattg 420
 aaataatgca cctagtaatg tggccgacat ctcttctcac caccatggac tgttttcaac 480
 aacagttgat cttctggtct gtgctgagag gcgcatgcat gtctttcgtc acgtcgggca 540
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 caagtaccgc aaaggcttta ttctggactg gctatctcat aaaanggatt tctgtaagac 660
 ttgacagtgt cattccctca gaaccyaggt ttgtttctaa agccacggta ttgtccrrgr 720
 rccctgtgt ktggggncag gtagctatcc ctcccatgtc attagtaatc ctttaggatt 780
 ttaaggtaca atggg 795

<210> 111

<211> 1332

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (6)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1194)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1237)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1241)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1300)

<223> n equals a,t,g, or c

<400> 111

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cctcagaccc tccccacatc tgaaactgcc tcccccaac caccagcagc agcaggggcc 180
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ttagccacc ctcaaacca gggccccctg gcacctgggc tctggccgtg tttctggcc 300
agagcccccac tttcctaact cgtgctccct tccgccttct tttccgtact gtgaagaaag 360
aactctccac ccagctccc accctgccct ggcctgggtg gaggaactgt gcctccatcc 420
ccagaagaaa cagccccctc tgctgctggg gtgggactgt ctgtgtgccc tgtgggggtc 480
cgtgtgagca ggcccacctg gctccagacc cggcccaac ctgagacaga accaggctga 540
gccaggcctc cacccccacc cccgtttgct gggggctcct ccagccgccc ccatgggraag 600
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aagctctccc tgaggccaga ggccgggcct gggccgggag cccaggggaa ggccaggctg 720
gaccccggtc ycacaccac atccagcctg caggcctctc tgcagtcctc tcacctccc 780
tmagctccc ttcctctgca gtcaccctca gctccccctc cttgcccgcc tctcccccg 840
ccgccccacc agttaaacgg atgaccaaag acctttctta tgccggaagc aaaaaccaa 900
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ggggctcagt ggaggcaggg ccctgcccc cttcccttcc cggtccttg cccagcctgg 1140
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acggggagcc cttcttccc tggaccctgg ggcttgnctc ntgggggggc tctccaaga 1260
accctctctc taagggaacc aagtttcacc cgttcgtggn tgggggatgt tgggatttct 1320
aaggcaaaag ag 1332
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<210> 112

<211> 743

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (53)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (272)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (275)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (278)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (590)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (618)

<223> n equals a,t,g, or c

<400> 112

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gggtgcggatg gccagctcca ggatgaccgc ccgggaccgc ctcacaaata aggtggccct 120
ggtaacggcc tccaccgacg ggatcggctt cgcacgccc ggcgtttggc ccaggacagg 180
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tgctgtcaac cctttctttg gaagcataat ggatgtcact gaggaggtgt gggacaagct 420
ctggatggac aaggaaaaag aggaaagcat gaaagaaacc ctgcggataa gaaggttagg 480
cgagccagag gattgtgctg gcatcgtgtc tttcctgtgc tctgaagatg ccagctacat 540
cactggggaa acagtgtgtg tgggtggagg aaccccgctc cgctctgan ggaccgggag 600
acagcccaca ggccagantt gggctctagc tctgtgtgst gttcctgcat tcamccaytg 660
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aaagatccag ccttccctgc cgt 743

<210> 113

<211> 1690

<212> DNA

<213> Homo sapiens

<220>
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 <222> (1659)
 <223> n equals a,t,g, or c

<220>
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 <223> n equals a,t,g, or c

<220>
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 <222> (1676)
 <223> n equals a,t,g, or c

<400> 113
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 ccagacacag gccccgagaa gctgccatca ctggagcacc gggactcccc ttggcaccga 180
 ggccccgccc ctgccaggcc taaaatgctg gttatcagtg gaggtgatgg ctatgaggac 240
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 accacctyct cctgtggagg gtgtgacctt gtctgccgtg gccaggact sgccccccca 360
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 aacacccact ggccagccag gccatggctt ctcccgaccc tctggctgcc ccggtgcttc 540
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 tttggttttg tttgggttg gtgggtcatt gcggtcttag attatgtttc tcttctacc 1560
 aaacagtcac gtattaaact tctttggatg atgaagtta aagagtcaat aaatagaac 1620
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 aaaaaaaaaa 1690

<210> 114
 <211> 620
 <212> DNA
 <213> Homo sapiens

<400> 114
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ttgtaagggg ccatagcctc ttcaggacca actggaggga gagttaggaa acaccagctc 180
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tgcttgccctg aggtcccact gtgttagtggt gtgggcagga ctggaactcg gttctccaac 480
agcccagagc tcaactctttt acaccagag gtggagcagg tggcttaggg ggtggttatg 540
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agtaccgagt cccacccctt 620

<210> 115
<211> 542
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (392)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (412)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (511)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (521)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (535)
<223> n equals a,t,g, or c

<400> 115
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caagggtgtc acctccggcc cccgggcctt cagcagccgc tcctacacca gcgggcctgg 180
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agcagcatga gtgtggtcgg gggctacggc ggcggggccg gggtatgggg ggcacacagg 300
ccgtctcagt gaaccagagc ctgctgagcc cccttwaagc tggaatkagg tcccaacatc 360


```

caagctgtgc gcaacccagg agaaggagca gntcaagacc ttcaacaaca anttggcttc 420
gttcacgcgac aagtgaagca ctggagcagc agaacaaatt tttggagacc aattggagct 480
tcttaaagca gcagaagacg cgcggagaac ntagacaaat ntgcgagagt aaatnagaac 540
tt
542

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<210> 116

<211> 525

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (420)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (424)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (517)

<223> n equals a,t,g, or c

<400> 116

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atactgccat cgacgggata ccggtatacc gcgaggaact gatgatcgtc acgccacaag 180
gatatgcgcc agtaaccctg gccagtcagg ttaatggcag taacatttat gccttccgcg 240
ccaattgttc gtatcgtcgc cacttcgaga gctggtttca tgctgacggg gccgctccgg 300
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gcattgcgct tattccgcgc tctatgctgg aaagtatgcc ggggcacac cagttgaan 420
cgknggccgt tagctgagca atggcggttg ttaacaacct ggctggtctg gccgtcgtgg 480
tgcgaaaaaa cgttccgctc gaaggggggc ccggtancca attcg
525

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<210> 117

<211> 728

<212> DNA

<213> Homo sapiens

<400> 117

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tgacggcagg cgaggaggac gagcaggttc ccgacagcat cgacgcacgc gagatcttcg 180
atctgattcg ctccatcaat gaccgcggagc atccactgac gctagaggag ttgaacgtag 240
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cagagcatgc agtgaacaag caacttgagc ataaggagcg ggtggcagct gccctggaga 480
acacccacct cttggagggt gtgaatcagt gcctgtcagc ccgctcctga gcctggcctt 540

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tgaccctca gcctgcatac tggatcctg gtcccagctc ctgccagggc tgttaccgtt 600
gttttcttga atcactcaca atgagaaact aacattttgc tttttgtaat aaagttaatt 660
tatattcarw tcaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa acccgggggg 720
gggcccc 728

<210> 118

<211> 948

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (920)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (944)

<223> n equals a,t,g, or c

<400> 118

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agcagaagag gaagcctggg ctgcggcgga gcccatcaag aaagtccgga agtctctggc 180
tcttgacatt gtggatgagg atgtgaagct gatgatgtcc aactgcccc agtctctatc 240
cttgccgaca actgcccctt caaactcttc cagcctcacc ctgtcaggta tcaaagaaga 300
caacagcttg ctcaaccagg gcttcttgca ggccaagccc gagaaggcag cagtggcccc 360
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ctgcgggggg accagggacc agcttttcat gcaggagaaa gcccggcagc tcctggggccg 480
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gagcccattc tcatgtttac aggggttgtg ggggcagagg gggctctgtg atctgagagt 600
cattcagggtg acctcctgca gggagccttc tgccaccagc ccctccccag actctcaggt 660
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cgtcagcttc tcccaagccc acgtcaggcc tggcctcatc tcagaccctg cttaggatgg 840
gggatgtggc caggggtgct cctgtgtcga ccctctcttg gtgcattttt ttggaagaat 900
aaaattgcct ctctctttgn aaaaaaaaaa aaaaaaaaaa gggnggcc 948

<210> 119

<211> 211

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (123)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (125)

<223> n equals a,t,g, or c

<400> 119

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tcgaccacg cgggccgtt ggtggggctg gctgctttct cgcgtttccc cccaaccccg 60
tccggcctcg cccagcgctt ccacgcgaa ccaactgccg gaggcgcggc gcggcgctga 120
gcngngcgag tgtgaggaaa ccgccgcctc agccgagcgc gcggggcccg ccaggcgctt 180
agttttcggc gcgcagtcgc ggtcccccg c 211
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<210> 120

<211> 1308

<212> DNA

<213> Homo sapiens

<400> 120

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gtttggacat gagctgaggg cacggtcgcg ggcggtcagc ctgttcgcag ctacggcgag 180
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gtcccgatth taggggtagg gagaagtgtc agcttcaggc atcgcgaggc gtggcgggcc 300
catggccccg ctgggaggcg ccccgcgctt ggtactgctg ttcagcggca agaggaaatc 360
cgggaaggac ttcgtgaccg aggcgctgca gacgagactt ggagctgatg tctgtgctgt 420
cctccggctc tctggtccac tcaaggaaca gtatgctcag gagcatggct tgaacttcca 480
gagactcctg gacaccagca cctacaagga ggcctttcgg aaggacatga tccgctgggg 540
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ggcaaggcag gaaacctctg gagacctcat tttctccatg gggaagacag ccatgctctt 1080
caggaggaga ctccaagggc aaaggagggt gtcttggtg tgcttgaagg cgaaacctg 1140
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tcagccctt gttctgggca agaaccaga gctccccagt gtggatacta ataaacctct 1260
tgagacacaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaagg 1308
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<210> 121

<211> 2516

<212> DNA

<213> Homo sapiens

<400> 121

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ctattgaaat cacaaaagta gaacagggcw ytttattttt gtataattta ggattagga 180
tgcttctttg ttctaacaag tcatgttttc taaccttct ttcactaagc aaaccagaac 240
agatttgaac tgttatgggt tatatattag tatggagatc agctcagatg acattaaaaa 300
tgccgtagtg ttattcttgt atgccaaatc ttttttccc caaaattagc actttaattt 360
tatttactgt tataatattt gttttcttag attaggtagg aaatcttaatt ttggccaccg 420
cctactttga caagtaaata ttacatcata cgattttgca acattaaatt agaacactag 480
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aaactaaaaa attatgtttc agtgaatgct acaactaagc attttttttt tttaagaaaa 540
acaattgtat tatgttttgt tgccttgcca ctttgagtat cttatctgaa aatctgttcc 600
ttgccatggt tttctcctgt taacataaac tatgtgccct gtgaatttct ggggactgaa 660
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<210> 122

<211> 1139

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1053)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1124)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1125)

<223> n equals a,t,g, or c

<400> 122

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<210> 123

<211> 2114

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1966)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2039)

<223> n equals a,t,g, or c

<400> 123

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tagtgagtcg tattataagc taggcactgg ccgtcgtttt acaacgtcgt gactgggana 2040
tctgctagct tgggatcttt gtgaaggaa cttacttctg tgggtgtgaca taattggaca 2100
aactacctac agag                                     2114

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<210> 124

<211> 583

<212> DNA

<213> Homo sapiens

<400> 124

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gcccgccta ttcccttggg cttttaaaaa gcgtcttgga tggaggtggt gcaggtgctc 60
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ttgtgactgc acaccgggac cccactcaat tcaaagacc agactgcttc aaccctacca 180
acttcctgga caagggcaag ttccagggca atgatgcttt catgcccttt gcctcagggtg 240
caggcagagg aggaagggga ccagcctgga ctggctctgg ggtacctgg gctcactgtg 300
cacctgtgta cccggcaaa cagatgtgcc tgggcacagg cctggcccac tcgggtatct 360
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ccatcaacct cacctgcagt gcaactggcct gggcagtgct ccccagact tccagctcca 480
gccagtggcc tgctgaggtc aggtccact atggtgggct cactggccct caaacctcca 540
taccctccts ggtcaataaa ggccctaaat tgcaaaaaaa aaa 583

```

<210> 125

<211> 1987

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (7)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (14)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (517)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1960)

<223> n equals a,t,g, or c

<400> 125

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cagtacngtc cgantcccg gtcgaccac gcgtccgatg gcggcggagg aacctcagca 60
gcagaagcag gagccgctgg gcagcgactc cgaagtgtta actgtctggc ctatgatgaa 120
gccatcatgg ctcagcagga ccgaattcag caagagattg ctgtgcagaa ccctctggtg 180
tcagagcggc tggagctctc ggtcctatac aaggagtatg ctgaagatga caacatctat 240
caacagaaga tcaaggacct ccacaaaaag tactcgtaca tccgcaagac caggcctgac 300
ggcaactgtt tctatcgggc ttctcgattc tcccacttgg aggcactgct ggatgacagc 360
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cctccccggg cgagtaggat gtgtctcgag taggggtgtc ycctccttcc cgggcgatgg 480
gctggactct ggccttgcca rgcggggcag tgctgtntcg gccctggcgt ctgggctggt 540
cgaggagccc atgctgggcc cgccctttcca tcccaccccc aggttcaagg ctgtgtctgc 600
caagagcaag gaagacctgg tgtcccaggg cttcactgaa ttcacaattg aggatttcca 660
caacacgttc atggacctga ttgagcaggt ggagaagcag acctctgtcg ccgacctgct 720
ggcctccttc aatgaccaga gcacctccga ctacctgtg gtctacctgc ggctgctcac 780
ctcgggctac ctgcagcgcg agagcaagtt cttcgagcac ttcacgagg gtggacggac 840
tgtcaaggag ttctgccagc aggggttggg gcccatgtgc aaggagagcg accacatcca 900
catcattgcy ctggcccagg ccctcagcgt gtccatccag gtggagtaca tggaccgcgg 960
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ctctgcattg cctgcctttt tgccttcacc tcttttcttc cccgccccct gcacattcgg 1860
gktctcagcc cccaggtgtg gagtccttg gggcaggccc tcaataaatg tgaaactgct 1920
```

gctgcaaaaa aaaaaaaaaa aaaaaaaggg ggccgcttan agatcctcaa gggccaagta 1980
cggtgat 1987

<210> 126

<211> 1451

<212> DNA

<213> Homo sapiens

<400> 126

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ggctcgacca cgctccgag atggcggagc gcgggtacag cttttcgctg actacattca 60
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cgctccgtgg aattaaagct gcaaatggtg tggattagc aactgagaaa aaacagaaat 180
ccattctgta tgatgagcga agtgtagaca aagtagaacc aattaccaag catatagggt 240
tggtgtacag tggcatgggc cccgattaca gattgcttgt gcacagagct cgaaaactag 300
ctcaacaata ctatcttggt taccaagaac ccattcctac agctcagctg gtacagagag 360
tagcttctgt gatgcaagaa tatactcagt cagggtggtg tcgtccattt ggagtttctt 420
tacttatttg tggttggaat gagggacgac catatttatt tcagtcagat ccatctggag 480
cttactttgc ctggaaagct acagcaatgg gaaagaacta tgtgaatggg aagactttcc 540
ttgagaaaag atataatgaa gatctggaac ttgaagatgc cattcataca gccatcttaa 600
ccctaaagga aagctttgaa gggcaaatga cagaggataa catagaagtt ggaatctgca 660
atgaagctgg atttaggagg cttactccaa ctgaagttaa ggattacttg gctgccatag 720
cataacaatg aagtgactga aaaatccaga atttcagata atctatctac ttaaactatg 780
ttaaagtatg ttttgttttg cagacttttt gcatacttat ttctacatgg tttaaatcga 840
ctgtttttta aatgacactt ataaatccta ataaactggt aaaccacact tccagccttt 900
taggagttgc taaaatttta acagttattt ccygcttttt atcacagttg atttctgaag 960
actayattgc caagcagaat gatgaaatga ctttttcggt gtcaggcaat ttggttaag 1020
tcaaatctta atgcctctt cgctatcaga tgttcctgt gtttcataa agcaaatgc 1080
tgatttttgt aaaaaacatg actgcttcta gagctgggag gatctgcaga ctttcacgga 1140
ttcatggaac aagaaaagaa gcataggtac ttttaggtgc cattaggtat tgatcagtga 1200
aatcctaggg tgctctatga gattgtacta ggcctatgaa gagggtgaag ccaaataggt 1260
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ctccacaagt aggtaaacat gtttaaagga acccggttc ttagattttg ttagactttt 1380
taaactcaag gatgagcata agtgcttgaa ataaaatgct aatacttaag tgtcaaaaaa 1440
aaaaaaaaa a 1451

```

<210> 127

<211> 1234

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (857)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1204)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1226)

<223> n equals a,t,g, or c

<400> 127

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aggttcccag ctagccagta aattctttaa agacaagcat tgtacccttt gcctcagtgt 60
gccagcacc aacctggcac atgctctatt catgttttcc atgagtgttt catgttagag 120
gtgtattttg tacacagggt ttatgctggg ggctcagaga gaagtggaca gcagattgtt 180
ggccctccca ggaagaaaag tcccaacgag ctggtgggat gatctcttta aagggtgcaa 240
agagcatgga gctgtagctg tggagcgagt gaccaagagc cctggagaga ccagtaaacc 300
gagaccattt gcaggagggt gctaccgcct tggggcagca ccagaggaag agtctgccta 360
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gaagagtggg ttacgcctgg ataattggaga actcagaagc taccaagacc catccaatgc 480
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cgggtggacag gtgaacttgg atatggagga ccatcgggac gaggactttg tgaagcccaa 600
aggagccttc aaagccttca ctggcgaggg tcagaaactg ggcagcactg ccccagggtg 660
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ttaatcgacg aatcagagcc taccacaaac atccaaattc ggcttgacga cggcgggagg 780
ctggtgcaga aatttaacca cagccacagg atcagcgaca tccgactctt catcgtggat 840
gcccggccag ccatggntgc caccagcttt atcctcatga ctactttccc gaacaaagag 900
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cggttaacat aaccgcccag ccagctgcct ggctccctc ctgtgtttcc catggccagt 1020
ggccatgccc catggggatc gcccctcctg ccccttctgt cacaccagc agtccagtgc 1080
aacgtctcct ccatagctct gggttcttag atcttggttg gacgtttgtt ttctccttag 1140
ttgcatttcc tgggtttttg tgatgatcaa tggactttaa tgaaaaaaaa aataaaaaca 1200
accnaaaggg gggcccgtc ccaatncccc cctt                                     1234

```

<210> 128

<211> 863

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (840)

<223> n equals a,t,g, or c

<400> 128

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cccacgcgtc cgcaggcgcg ctccgggtgc cgctggctct tcgcacgcgg ccatggccga 60
ctccgagctg cagctggttg agcagcggat ccgcagcttc cccgacttcc ccaccccagg 120
cgtggtattc agggacatct cgcccgctct gaaggacccc gcctccttcc gcgccgccat 180
cggcctcctg gcgcgacacc tgaaggcgac ccacgggggc cgcacgcact acatcgacag 240
cctagactcc cgaggcttcc tctttggccc ctccctggcc caggagcttg gactgggtct 300
cgtgctcatc cgaaagcggg ggaagctgcc agggccact ctgtgggcct cctattccct 360
ggagtacggg aaggctgagc tggagattca gaaagacgcc ctggagccag gacagagggt 420
ggtcgtcgtg gatgatctgc tggccacttg tggaaccatg aacgctgcct gtgagctgct 480
gggccgcctg cargctgagg tcctggagtg cgtgagcctg gtggagctga cctcgttaa 540
gggcaggagg aagctggcac ctgtaccctt cttctctctc ctgcagtatg agtgaccaca 600
gggcctccca gcccaacatc tccagctgga tcccaggga atatcagcct tgggcaactg 660
cagtgaccag gggcaccggc tgccacagc gaacacattc ctttgcctgg gttcagcgcc 720
tctcctgggg ctggaagtgc caaagcctgg ggcaaagctg tgtttcagcc acactgaacc 780

```

caattacaca cagcgggaga acgcagtaaa cagctttccc acaaaaaaaaa aaaaaaaaaan 840
aaaaaaaaaa aaaaagggcg gcc 863

<210> 129

<211> 1238

<212> DNA

<213> Homo sapiens

<400> 129

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ccctccctgc ccctgcccta gctgctgtgt gttcagttgc cttctttcta cctcagccgg 180
cgtggagtggt tctctgtgca gttagtgcc cccacacac ccgtctcttg attgagatgt 240
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tcccgggtga ctggcagttt tcacggtcta gggccgagac gatggcatgg ggcctagagc 480
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cttaacatcc ttatctgtgt ccgccacgga ggtgactgag ctgctagcga gttgtcctgt 660
cccaggtact tgagtttttg aaaagctgac tcacgcccac ccattctaca gcccttccct 720
ggggacagtc gcttccgcct tgacacctca ctctcagttg aataactcaa gcttgggtcat 780
cttcagactc gaattcttga gtagaccag acggcttagc ccaagtctag ttgcagctgc 840
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acagggaaaag aaagcaaggc ccttttccctg cctttcccg gatctgtcta ctccacctcc 1020
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attctyawca agaagattta tgaggagaag aaaaagaa 1238

<210> 130

<211> 379

<212> DNA

<213> Homo sapiens

.

<220>

<221> misc feature

<222> (373)

<223> n equals a,t,g, or c

<400> 130

tggtttggga gctgccaggc tcctgggagg atcgcagtca gcagagcagg gctgaggcct 60
gggggttaga gcagagcctg cscatctgga ggcagcatgt ccaagaaagg gagtggaggt 120
gcagcraagg acccaggggc agagccacgc tggggatgga ccccttcgag gacacgctgc 180
ggyggctgcy tgaggccttc aactgagggc gcacgcggcc ggccgagttc cgggctgcgc 240
actccagggc ctgggccact tccttcaaga aaacaagcar cttctrcgmg acgtgctggc 300
ccaggaactg cataagccag ctttcgaagg cagacatata tgagtcatcc ttgcccagaa 360
cgaggttgaa tangctctt 379

<210> 131

<211> 1786

<212> DNA

<213> Homo sapiens

<400> 131

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cctgggcgct aagatggcgg cggcgtgagt tgcattgtgt gtgaggatcc cggggccgcc 60
gcgtcgctcg ggccccgcca tggccgtcac catcacgctc aaaacgctgc agcagcagac 120
cttcaagatc cgcattggagc ctgacgagac ggtgaagggtg ctaaaggaga agatagaagc 180
tgagaagggt cgtgatgcct tccccgtggc tggacagaaa ctcatctatg ccggcaagat 240
cttgagtgac gatgtcccta tcagggacta tcgcatcgat gagaagaact ttgtggtcgt 300
catggtgacc aagaccaaag ccggccaggg tacctcagca cccccagagg cctcaccac 360
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cccacctgcc gccagagagg acaagagccc atcagaggaa tccgccccca cgacgtcccc 480
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cgtggagtat ctgctcacgg gaattcctgg gagccccgag ccggaacacg gttctgtcca 720
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cctggctcctc caggcctatt tcgctgtgta aaaaaatgag aacttggctg ccaacttcct 1140
cctgagtcag aactttgatg acgagtgatg ccaggaagcc aggccaccga agccccacc 1200
ctacccttat tccatgaaag ttttataaaa gaaaaaatat atatataatc atgtttatct 1260
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caactttgat cctccattgg agtggcccaa atctttccat ctagggcaag tcctgaaagc 1620
ccaaggcccc ctccccagtc tggccttgcc tccagcctgg agaagggcta acatcagctc 1680
attgtcaagg ccacccccac ccagaacag aaccgtgtct ctgataaagg ttttgaagtg 1740
aataaagttt taaaaactaa aaaaaaaaaa aaaaaaaaaa aaaaaa 1786
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<210> 132

<211> 974

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (165)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (853)

<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (963)
<223> n equals a,t,g, or c

<400> 132
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tgcagaggac agtatcaaca acagcctagt gcagctgcaa gcgtncacat cagcagcaag 180
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cctgtaacag cctcacgccc aagagcacac ctgttaagac cctgcccttc tcgccctccc 480
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ggcggagccc atncaagaaa gtccggaagt ctctggctct tgacattgtg gatgaggatg 900
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aanttttcca gcct 974

<210> 133
<211> 634
<212> DNA
<213> Homo sapiens

<400> 133
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cagtgcctt tccagccctt aagagaagta aaacttagct gcagcgtcag gaggtggacc 180
ccagagtgtg agtggcacgc ttctctgtga acccgctc accatgtttg ccacatctgg 240
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ctcagtgtg ctgcgacatg aacgagctca cggcggtgac ggccgcttc gttgcctaga 360
atgcggtgag cgtgtgcac gggctgctga cctccgagcg cacaggcgca cgcagtctgg 420
ccagaccctc tacatctgca gtgagtgcg acaaaagcttc cgccacagcg gccgtcttga 480
cctacacttg ggcgacacac ggcagcgatg ccgcacttgc cctgcccga cwtgcgccg 540
gcgcttcccg cacctcccg cgctgctgct acaccggcgc cgccagcatc tgccagagcg 600
gccccgscgy tgcccgctgt gcgycctcag gttt 634

<210> 134
<211> 1855
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1818)
<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1845)

<223> n equals a,t,g, or c

<400> 134

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cgcgcgagg cgggcctctg tgtgtgcgcc acagcgagcc ggtgtgcggc agcgacgcca 180
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ggccgcccgt catcgtcctg cagcgcgag cctgcggcca agggcaggaa gatccaaca 300
gtttgcgcca taaatataac tttatcgcg acgtggtgga gaagatcgcc cctgccgtgg 360
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<210> 135

<211> 917

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (913)

<223> n equals a,t,g, or c

<400> 135

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```

```

tggccgcca agttggggg cgagctcggg ggtgacgcgc ggccctcacg tgacccarag 120
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tgccctgagc tcggcgggct ggcattcggc ccggggaaaa gcgagcagg tctgcgaggc 240
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917

<210> 136

<211> 1271

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1236)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1255)

<223> n equals a,t,g, or c

<400> 136

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atccgcgggc tggccaykc catccgcctg ctccctggaat acacagactc aagctaygag 180
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gcactccctg aaatgctgaa gctctactca cagtttctgg ggaagcagcc atggtttctt 540
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gctcctgcag catggtccct gccttaggcc tacctgatgg aagtaaagcc tcaaccacaa 1200
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<210> 137

<211> 2017

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (295)

<223> n equals a,t,g, or c

<400> 137

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aaggacaaca ccagaatgaa gagggctcca caagacacct gttatcctct tctttcacc 480
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ccctgagctc ttcttccctc aataccatta aaaaaa 2017

<210> 138

<211> 937
<212> DNA
<213> Homo sapiens

<400> 138
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aagcaaaatg gggaggggga ggaagcagt actttttttt ggtaattatg cgcttttttt 360
taatttttag aatttgtctt ttactgtgtg gtgggctggt gatatttcat caagataagc 420
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cacacaagct tctgtgttca gtgaattgt aactgctttt tgtatttgga gagagtgaact 600
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<210> 139
<211> 2759
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (171)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1654)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2743)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2744)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2746)
<223> n equals a,t,g, or c

<400> 139

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<210> 140

<211> 1241

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (317)

<223> n equals a,t,g, or c

<400> 140

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa g 1241
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<210> 141

<211> 3405

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1569)

<223> n equals a,t,g, or c

<400> 141

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<210> 142

<211> 2268

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2169)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2196)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2232)

<223> n equals a,t,g, or c

<400> 142

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gccgaagacg tgcctaccc taccacaagg gctgtgtctc taccacctag cctgggcgtt 180
ggatctactg gaatgagcag cagccgcttc ctcggcagcc ttgggaagca cgggcgactg 240
gacagcagcc gccgggcacg gttatggggg cggggtgggc ggggaggcta gattgtttcc 300
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gcgcttccat cctaaagcca taatgaaaat atcttcctct cttccccatt ctatacaaaa 420
tactaagtgg tttcttgct cccactccct accccttagt taaatagggg ttattttcca 480
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gtggtttgaa ttgttttag ttcaagtcatt tggtaaaaac taggtttaag gagatgagct 600
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aaaacacaaa aagatattcc acaggacatg ccactttatt ataaaacctg acacaggcat 1860
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gtagtttaaa atgccttttg gggcagtttg aagcagttct tcatgccact tagtttgaaa 1980
ataaaattct agrtatgcaa atgattttct tagaaaactt cacaaaaataa aagatcttgt 2040
tttttttcca tagcacagta atgaatgttg ttatcaatca catacttttt tggattat 2100
tgtagcaaaa agttgattag cttaccaaga ttattaatag caatgtatgt gttataatac 2160
aacttagtna cattaaagcc tacgaaaact catcnggct gtaggatagt aataaaggaa 2220
gaattatgac tncattatga aaaaaagaag ttttaaagtt ttcaatac 2268

```

<210> 143

<211> 1757

<212> DNA

<213> Homo sapiens

<400> 143

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attttcacac acagtgtgta agatgtgca agaccaaatac atagctcata aaatcagggtc 180
ctgagatagt taccataaaa gaggaatcct ttgagtgtat gccattgggtg agccgatgag 240
catggaccat agaagggtc aatgtagaag gtaaaatttg caaatcataa ttgagaaata 300
tgaaatgtat tcccatacat aatatggat aggggtgtaat gtacctgctt ttgatcactt 360
ttcattttta agtgctattc acttgatctt aaatgttcca tgaactgtta aatttcttaa 420
gttacatagt tactacacca catttatgtg tatgttatgt tttaatagtc aatgataggt 480
atgtacaatt gataatataa aggggtcctat tgaacttga gagcctgttg agttttggtt 540
agttgtagat tgcattttta taaaaaaaaa tacagataga ttgatgataa tagatattgg 600
ggcattgttt ctgtctcatg agaattcttt tattcattac cataagcctt cactgatact 660
ataagcatta ttttaaatga cgctgatctt aagtctgaaa taaatggaaa gcagaaaagg 720
tgagccagtt gatttgaatg cattggatat tagtgtaga aacaatgtat agtttagatt 780
gaaactgaac tgacttattt agcacttaaa caaaaatttg acaatgtttt tagttttttt 840
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cagtgtctta gggagatgca gcttggactt gaggtaaatt gaatacttta caactgtggt 1620
ttagagtttg ctttaatgac attgtatgta aaaggcacca tgattgtgtt aattttgtat 1680
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aaaaaaaaaa aaaaatt 1757

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<210> 144

<211> 1062

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (52)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1056)

<223> n equals a,t,g, or c

<400> 144

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gtggcaactg gctgggaatg gctgaggggc tacctactgc ttgcggcctg ccagcgggag 120
gagggggcg gaaagaagaa agggggcggg gttgagggg gcgggcctgg acctggggag 180
tgaaagcgaa agcccgggcg actagccggg agaccagaga tctagcgact gaagcagcat 240
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atacctgaat cagctcttgc aagaggactc cctcaatgtg gctgacttga cttccctccg 420
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gtccctgctt gccctggtta agccagaagt ctggactctc aaagagaaat gcattctggt 600
gattacatgg atccaacacc tgatcccaa gattgaagat ggaatgatt ttggggtagc 660
aatccaggag aaggtgctgg agaggtgaa tgccgtcaag accaaagtgg aagctttcca 720
gacaaccatt tccaagtact tctcagaacg tggggatgct gtggccaagg cctccaagga 780
gactcatgta atggattacc gggccttggg gcatgagcga gatgaggcag cctatgggga 840
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cagcaacctg gagaaaattg tcaacccaaa gggggaagaa aagccatcta tgtactgaac 960
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aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaanaaaa aa 1062
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<210> 145

<211> 1030

<212> DNA

<213> Homo sapiens

<400> 145

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gcggtcctgg acttgcccc agacagccgg cagggtcgtg gccagaacgc cggccgggac 120
catctgcaca ggcgctcgac agctccaaga cgctcgggcc aagcagaaag ttgaacagaa 180
cgcggctccc agccacacca agttcagcat ttaccctccc attccaggag aggagagctc 240
tctgaggtgg gcaggaaaga aatttgagga gatcccaatt gcacacatta aagcatccca 300
caacaacaca cagatccagg tagtctctgc tagtaatgag ccccttgccct ttgcttccctg 360
tggcacagag ggatttcgga atgccaagaa gggcacaggc atcgagcac agacagcagg 420
catagccgca gcggcgagag ytaaacaaaa gggcgtgata cacatccgag ttgtggtgaa 480
aggcctgggg ccaggacgct tgtctgccat gcacggactg atcatgggag gcctgggaagt 540
gatctcaatc acagacaaca cccaatccc acacaacggc tgccgcccc ggaaggctcg 600
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gcagtaaggg agagttttgc ctccctacac agtggccttt gcttgcaact ccagctggag 780
atgggtgtgc ccagaagta agctttgcat ctcttacaag aggggagcta caggggcagc 840
cgtgcctagg cccaaactct gctctgagaa aataaatatc tgtaccacct gtcataattt 900
tgagattttt tgctttcaga gttacgtaat tcctaattcc tcttgaaaaa gagagtgtga 960
aatgaggtga ggcctcagat gaaagtaaaa tataaatgtg agttgctatt taccagaaaa 1020
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aaaaaaaaaa

1030

<210> 146

<211> 814

<212> DNA

<213> Homo sapiens

<400> 146

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actgggcat ggagactgtg gcacagtaga ctgtagtgtg aggctcgcgg gggcagtggc 120
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ctgctgcccc aaggagcaa ggaggaacag cgggattacg tcttctacct ggccgtgggg 360
aactaccggc tcaaggaata cgagaaggcc ttaaagtacg tccgcggggt gctgcagaca 420
gagccccaga acaaccaggc caaggaactg gagcggtca ttgacaaggc catgaagaaa 480
gatggactcg tgggcatggc catcgtggga ggcatggccc tgggtgtggc gggactggcc 540
ggactcatcg gacttgctgt gtccaagtcc aaatcctgaa ggagacgcgg gagccacagg 600
agaacgctcc aggaggccct gtccatcctc gctgtccttt cctgttctc cccctgcccc 660
ccgtctctat cctctgtggc cttcagctaa tttctgctcc cctgagattc gtccttcagc 720
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aaaaaaaaaa aaaaaaaaaa aaaaaagggg gggg                                     814
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<210> 147

<211> 2678

<212> DNA

<213> Homo sapiens

<400> 147

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cgtgttaaga agcaacttca ggcattaagt tcagaattag cccaagccag agatgaaacc 180
aagaaaacac aaaatgatgt tcttcatgct gagaatgtta aagcaggccg tgataagtac 240
aagactctgc gacagattcg acaaggcaat acaaagcagc gtatcgatga gtttgaagca 300
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gcaggccttt gcagatatga tggaaatgcat cccaccttgc caaagcactt acaccagttt 420
gactgtgcta gctaaaagac aaatttaagg ggagctcttc aacattaagg cagtatgata 480
tcatgcttgg ttttcttttt tcttttggtc cagggaatgg agaatggtgt tccattgcct 540
cttttcacat tttttttctt tttctttttt tttctgtttg aagattaaca ctaattatca 600
cgtctgacaa atgtgtatgt gtggtttcag ttctgtgtac attttaaagg ataatggtga 660
acattttaat gggtttccct tgccctttcc atatttaacc tatttccaca ttctctctca 720
ctcacatttt ctcagtgtgc ccttctctta tctgcatgt ccatagccat aattccacca 780
tcatacagat caggcagtgt ttaaaatgat ggtaggtagc acagtggaca gtctttgatc 840
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aatgttattt tttaaaacct ggacctttcc tggragggca gcatataara acatcagtgc 1260
ccgaggaggg gacaacaata ctacctcact actacatctg tgatgactgg ttgttcaaac 1320
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acaatggagt gtgtaaggta tatgttttat aattcataac catagcctcg atcatcaaga 1380
aatacttttcg aaatttcatt ttccttcaga atatcttaag agtgctaaat ttttaactgc 1440
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<210> 148

<211> 1028

<212> DNA

<213> Homo sapiens

<400> 148

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tgacctcgtg atccgcccgc ctccgctct caaagtgtg ggattctgtg tgttttgtgc 180
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aaggtagata gaaggacaga aaggactatt taaagtttg actgaaggag aaaaaagcaa 600
aattcttgtt tcatcccaat tctagttaga acaaagttaa acccccgtaa tcttaaagag 660
aaaatctttg gaggttttaa ttaaaccatt tatacattta agtcttgtt aatggtgctt 720
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tgatgaaatg taacacttct tcatctttaa cttgaaatca aaactatcag attttatttt 840
tgtataattt aaggaaggt aagttagggg actagaagac tctaaattgg cttctacaga 900
tcaataattt aatgtaact agttgggatt ttatagttaa aattatattt gtgtatataa 960
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<210> 149

<211> 1425

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (647)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1359)

<223> n equals a,t,g, or c

<400> 149

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tgcttccagg aggagctgag gaaagcggaa aggaaattac tgaagggtgc ccgggacaag 240
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gatgccactg catcatcaga taacagcgag acggagggga caccacaagt gtctgacaca 360
ccggccccta agaggaagag aagccctccg ctggggggcg cccctctctc ctccagcctc 420
tccctgcctc cttcaacagg gtttcccctt caggcctccg gggctcccct cccatacctg 480
agctcgtctg cctcctcccg ctacccccca ttcccttctg actacctggc cctgcagctg 540
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cagagaccct gcaatggcca cctctttaa agggcagctg tacagggcta ggttttttca 1140
atgaagtttc tgtattaaag gagtggctct gggtttgtt tttgtcctt ttttttgaga 1200
cattctcctc ctctgaacct ccctaatac gacctcctc ctgttggggg agagggacgg 1260
ggcagcgtgg agaggcagga gtgaggagcg cgggggacct gggccgggct ctgagcadtg 1320
cccgggtgtg cagatgatgg ggggtttgca tatttgcan gactagcga gtcaggcagg 1380
aggtttgcat atgtgaatat agaactccgc agccctcat gagca 1425
```

<210> 150

<211> 780

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (285)

<223> n equals a,t,g, or c

<400> 150

```
gctgcgagaa gacgacagaa ggggagagcc aatggaaagg ggctgccgcg cggccgtaaa 60
```

```
gagttttag agcagttcgg gtgcggtacg ttgcattccg gtaccggacg ccgagagcgg 120
tttgtctccg tctctggagt ttagggcgag aggtgatcat gtccggtcgc gggaaacagg 180
gcgcgcaaagt gcgagcaaaag gccaaatccc gctcctcccc cgcgggcctg cagttccccg 240
tgggccgagt gcacagactg ctgcgcaaag ggaactacgc ggasnagtgg gcgccggggc 300
gccggtgtac ctggcggcgg tgttgagta ccttacggcg gagatcctgg agctggctgg 360
caacgccgcg cgtgacaaca agaagaccag gataattccc cgccacctgc agctcgccat 420
ccgcaacgac gaggagttaa acaagctgct gggcaaagt accatcgctc agggcggcgt 480
cctgcccaac atccaggccg tgctgctgcc caagaagacg gagagtcaga agacgaagag 540
caaatgaccc tgacgccgcc ctcagggagc tggtccscg agcaaaggcc cttttcatgg 600
tcgtcccgcg atgcttttga atgtgctgga tgcatggag ggccggtgac atctagcggg 660
gaggtgggcg gcgagggtcc cggcgggagc caataaagtt ggtgaaaatc gtaaaaaaaaa 720
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 780
```

<210> 151

<211> 1066

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1061)

<223> n equals a,t,g, or c

<400> 151

```
ggaccgcgcca tggcgcgga gaaggtgctg ccgcggctga tcgcggagct ggcccgccgc 60
gtgcgcgccc tgccggagca actgaacagg ccgcgcgact ccagctcta cgcggtggac 120
tacgagacct tgacgcggcc gttctctgga cgccggctgc cgggtccggc ctgggcccgc 180
gtgcgcgcg agagccgct cttgcagctg ctgcggccgc tcccgtctt cggcctgggc 240
cgctggtca cgcgcaagtc ctggtgtgg cagcacgacg agccgtgcta ctggcgccctc 300
acgcgggtgc ggcccgacta cacggcgag aacttgacc acgggaaggc ctggggcatc 360
ctgaccttca aagacgcctc tttttcttca tcagggaaga ctgagagcga aggcgcggga 420
gatcgaacac gtcattgtacc atgactggcg gctggtgccc aagcacgagg aggagccctt 480
caccgcgttc acgcgcgccc cggaagacag cctggcctcc gtgccgtacc cgctctcct 540
ccgggccatg attatcgag aacgacagaa aaatggagac acaagcaccg aggagcccat 600
gctgaatgtg cagaggatac gcatggaacc ctgggattac cctgcaaac aggaagacaa 660
aggaagggcc aagggcaccc ccgtctagaa tgccagaacc agcgggtggc cttaggggct 720
gtgaggcagt ggggacctta ttgatgaaag aaaccgtctt tgcgttacac ccgagctctc 780
ctctcgagc agggagctca cctccgcga cgtgttctga ggtctgcat cttagggggg 840
agggctgggg caaatcgcca cctgtgcctt tcctctggcc ctgctgcccc cacaccaaac 900
tccgagggcc cagctgggg aaagcgggaa gcgctcgctc cttttcccc attagtgtc 960
tctctgcctg gatcccgga gaagctatga aagggaataa agagaaaaga artamaaaaa 1020
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa ncccct 1066
```

<210> 152

<211> 1649

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1543)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1579)

<223> n equals a,t,g, or c

<400> 152

```

accccggtc tccaaggagg tgtgacatca tcatcatctc tggccggaaa gaaaagtgtg 60
aggctgccaa ggaagctctg gaggcattgg ttctgtcac cattgaagta gaggtgccct 120
ttgaccttca cgttacggtt attgggcaga aaggaagtgg gatccgcaag atgatggatg 180
agtttgaggt gaacatacat gtcccggcac ctgagctgca gtctgacatc atcgccatca 240
cgggcctcgc tgcaaatctg gaccgggcca aggctggact gctggagcgt gtgaaggagc 300
tacaggccga gcaggaggac cgggctttaa ggagttttaa gctgagtgtc actgtagacc 360
ccaaatacca tccaagatt atcgggagaa agggggcagt aattacccaa atccggttgg 420
agcatgacgt gaacatccag ttctctgata aggacgatgg gaaccagccc caggacaaa 480
ttaccatcac aggttacgaa aagaacacag aagctgccag ggatgctata ctgagaattg 540
tggttgaaact tgagcagatg gtttctgagg acgtcccgtt ggaccaccgc gttcacgccc 600
gcatcattgg tgcccgcgcc aaagccattc gcaaaatcat ggacgaattc aaggtggaca 660
ttcgcttccc acagagcgga gcccagacc ccaactgcgt cactgtgacg gggctcccag 720
agaatgtgga ggaagccatc gaccacatcc tcaatctgga ggaggaatac ctgctgacg 780
tggtggacag tgaggcgctg caggtatata tgaaaccccc agcacacgaa gaggccaagg 840
caccttccag aggttttgtg gtgcgggacg caccctggac cgccagcagc agtgagaagg 900
ctctgacat gagcagctct gaggaatttc ccagcttttg ggctcagggt gctcccaaga 960
ccctcccttg gggcccaaaa cgataatgat caaaaagaac agaaccctct ccagcctgct 1020
gacccaaacc caaccacaca atggtttgtc tcaatctgae ccagcggtg gaccctccgt 1080
aaattgttga cgctcttccc ccttcccgag gtccgcaggg agcctagcgc ctggctgtgt 1140
gtgcgccgc tcctccaggc ctggcgtgc ccgctcagga cctgctccac tgtttaacac 1200
taaaccaagg tcatgagcat tcgtgctaag ataacagact ccagctcctg gtccaccggg 1260
catgtcagtc agcactctgg ccttcatcac gagagctccg cagccgtggc taggattcca 1320
cttctgtgt catgacctca ggaataaac gtcttgact ttataaaagc caaacgtttg 1380
ccctcttct tccacctc cctcctgcca gtttcccttg gtccagacag tcctgtttgt 1440
ggagtgaat cagcctctc cagctgccag agcgctcag cacaggtgtc aggggtgcaag 1500
gaagacctg caatggacag caggaggcag gttcctggag ctnggggggtg acctgagagg 1560
cagagggtga cgggttctna ggcagtcctg attttacctg ccgtgggggtc tgaaarcacc 1620
aagggtccct gaccctacct ccactgcca 1649

```

<210> 153

<211> 660

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (35)

<223> n equals a,t,g, or c

<400> 153

```

ccggaaattc ccgggtcgac ccacgcgkcc gcggnagwgc tcacacgtgt gctccctgcc 60
ctgtccttg ccccttgccc ggccgggctg tttctggcca tgggtcgctc ccgccggaca 120
ggcgcgacc gagcgactc tctagcccgg cagatgaagg cgaacggcgg cgccggact 180

```

```

tggatgagat tcaccgagag ctgcccctc agggatccgc acgaccccag cccgacccaa 240
acgccgagtt cgaccccagac ctgccagggg gcggtctgca ccgctgtctg gcctgcgcga 300
ggtacttcat cgattccacc aacctgaaga cccacttccg atccaaagac cacaagaaaa 360
ggctgaagca gctgagcgtc gagccctaca gtcaggaaga ggcggagagg gcagcgggta 420
tgggatccta tgtcccccc aggcggctgg cagtgccac ggaagtgtcc actgaggtcc 480
ctgagatgga tacctctacc tgacatggcc tgaagatgca gggcagagga atgcccattg 540
gacagtgacg caaggactag gctgggaggg agcgtgccaa ccccttttgc ctctgggttt 600
ggggagcgga gggcctcttc ttggtgccct gcccacaata aaggaactgg acaaagagaa 660

```

<210> 154

<211> 605

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (449)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (574)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (578)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (583)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (587)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (596)

<223> n equals a,t,g, or c

<400> 154

```

ggcagagctc caccttccat ccggcgccgg ctttcggcgc gacggtcgcc gcgttccatc 60
gtcgcgcggc ccttcgggag cccgagccc caatgtcggg cccaacgga gacctgggga 120
tgccggtgga ggcgggagcg gaaggcgagg aggacggctt cggggaagca gaatacgctg 180
ccatcaactc catgctggac cagatcaact cctgtctgga ccacctggag gagaagaatg 240
accacctcca cgcccgcctc caggagctgc tggagtccaa ccggcagaca cgcctggagt 300
tccagcagca gctcggggag gccccagtg atgccagccc ctaggctcca agagcccca 360

```

accgggaccc aaccctgcct ccctgggcta ggctctggcc tgggcactca mcccctggct 420
tagacamctt ctcaagggct ggccttcang gacccctggt gggctctgcct gcctggggcca 480
accttcctgc ctgggsctyc ccttggctam ctgggscagc cccaccaaac tggcatgccc 540
tcctgggggc caaagaatgg ggcctgcaac ccancantt gcntgcnaaa cccaanttcc 600
tgggg 605

<210> 155

<211> 695

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (173)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (499)

<223> n equals a,t,g, or c

<400> 155

gaaccctaga aaaaaggatg cagtactaaa gtgtcattca ttcaaagcca ctccctctttt 60
ggtattccac ccattttcca gacggtgaca ctgaggctca ggaagcagta gggacttgca 120
caaagccctt tgggaagcag gctgggaaac agtggaggga ggggtgtccat tanccccaag 180
gagacacagg atctgggctc tktytttsgc ctctctccca gaatacgtg ccatcaactc 240
catgctggac cagatcaact cctgtytgga ccacctggag gagaagaatg accacctcca 300
cgcccgctc caggagctgc tggagtccaa ccggcagaca cgcctggagt tccagcagca 360
gctcggggag gccccagtg atgccagccc ctaggctcca agagcccca accgggaccc 420
aaccctgcct ccctgggcta ggctctggcc tgggcactca ccccctggct tagacacctt 480
ctcaagggct ggccttcang gacccctggt gggctctgcct gcytggggcca cccttcctgc 540
ctgggrctc cccttgkcc tactggggcc agccccacc acctggcatg ccctcctggg 600
gccaagagtg ggcctgcaam ccaccattg sctgcccac caattcctgg gcgytcccca 660
wtytgcccag gcttgaatgt tcacatgaaa tgggt 695

<210> 156

<211> 780

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (289)

<223> n equals a,t,g, or c

<400> 156

cgggtgggctc gcgttgaggc tgcggtcatt gagggagcag gagctggatc cggcttccgg 60
aaggagctgg tgagcaggct gctgcacctg cacttcaagg atgacaagac caaagtgagc 120
ggggacgcgc tgcagctcat ggtggagttg ctgaaggctc tcgttggtgga agcagcagtc 180
cgcggcgtgc ggcaggccca ggcagaagac gcgctccgtg tggacgtgga ccagctggag 240
aagggtgcttc gcagctgctc tggacttcta gggatctcag ccgtggckna ggccaccccc 300

```

agaggagccc ctggtccaca gaagcaggcc ttgtgtttcc agcggcctct gataagaggc 360
aggggaaggam ctgaaggatt tggarttgat tcaaacaaga tctctgggag tctccagcct 420
gtgcagaagg ggcaggactg cagtgcactg cgggccttgg agtgtccagt ggggacactg 480
gtgtgggaag gggcagcacc tggggagtcc ctgcctctcc tccctgggac aatagtgtgc 540
atgccacccg gggctctaca ggcagggtgct gggaaaggcc tggccagcag gtagcctgtg 600
tgtttgacaa acagcagctg gcagcgctgc ctctgcccc cattcctgcc acccgacatc 660
aaagctggcg tgtgaccttt ccagccatgc gatattcccc ttggaagatg cttccccagg 720
ctataaattt gttctcacia agcaacatca ataatcaaa actgtctcty ccaaaaaaaaa 780

```

<210> 157

<211> 1127

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1113)

<223> n equals a,t,g, or c

<400> 157

```

aacttcagtg ccctcactgt agaatttaaa agccttactg ttgattgccc atggtggact 60
tgatggagaa attaaatata ttctattatg ctttacaaaa tactgtatat gtttcagcaa 120
gtttggggaa tgggagagga caaaaaaaaa ttacatttaa tctatgcatt tttgccaaagc 180
catattgagt tattttacta ctagagacat taggaaacta actgtacaaa agaaccaagt 240
ttaaaagcat tttgtggggt acatcatttc tataattgta taatgtattt ctttgtgggt 300
ttaaatgata aagacattaa gttaacaaac atataagaaa tgatgacct gtttgaaatg 360
taaatatttc ttagaacact ttcaatgggg gttgcattgt ccttttagtg ccttaatttg 420
agataattat ttactgcca tgagtaagta tagaaatttc aaaaaatgta ttttcaaaaa 480
attatgtgtg tcagtgaagt ttctattgat aattggttta atttaaaata tttagagggt 540
tgttggaact tcataaattg agtacaatct ttgcatcaaa ctacctgcta caataatgac 600
tttataaaac tgcaaaaaat gtagaagggt gcaccaacat aaaaaggaaa tatggcaata 660
catccatgat gttttccagt taacatagga attaccagat aaatactgtt aaactcttgt 720
ccagtaacaa gagttgattc atatggacag tatgatttat tgtttatttt ttttaacaaa 780
tacctcctca gtaatttata atggctttgc agtaatgtgt atcagataag aagcactgga 840
aaaccgatcg tctctaggat gatatgcatg tttcaagtgg tattgaaagc cgcactgatg 900
gatatgtaat aataaacata tctgttatta atatactaata gactctgtgc tcatttaatg 960
agaaataaaa gtaatttatg gatgggtatc ttttaatttt actgcaatgt gttttctcat 1020
ggctgaaatg aatggaaaac atacttyaat tagtctctga ttgtatataa atgtttgtga 1080
aattccatgg ttagattaaa gtgtrttggg aanaattctc catgggg 1127

```

<210> 158

<211> 1282

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (120)

<223> n equals a,t,g, or c

<220>

<221> misc feature
<222> (205)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (207)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (236)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (732)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1279)
<223> n equals a,t,g, or c

<400> 158
tgctctacaa atagtaaaaa taaaaaataa aaaaagtagc tgggcgtggt ggtgtgcacc 60
tgtgggtccca gctgcttggg atgctgaggt ggaaggatct cttaaaccce ggaggggtggn 120
aggctgcagt gaacttgcca ttgcaccact ggcactccag tctgggggac agagtgcagc 180
cccatctcaa aaaagtgttt aattnantat acttgtgagt ggtctatttg catttnaaaa 240
ctgcttttcta gaattaggat agctccctta ggtttaatgt tttggtgagc aggaatatca 300
gttacccttc cagatcttaa ttctagtgtt tttatcactt tttcatgagg tgatctcatc 360
ctcatctcct agcatgtctg gcaattttga tttctgaact ctgtgctacc tcagaggcca 420
gcttccttag ggaaaaatca gtgctgaaat aaagttatat ttccttttct gctctaaata 480
tatagtgggg gaataagaga aatgaagagg aattcctgag aacgtaatta ctgaaaactc 540
ccctctccca cgtaagtgtc ctccacacacc atggaccctt attcccccaa tttgcgaccc 600
cccacccccc cccacaacag gtgggtgatct ttgtgaagtc tgtgcagcgg tgcattgcct 660
tgggccagct actagtggag cagaacttcc cagccattgc catccaccgt gggatgcccc 720
aggaggagag gntttaaaga ttttcaacga cgaattcttg tggctaccaa cctatttggc 780
cgaggcatgg acatcgagcg ggtgaacatt gcttttaatt atgacatgcc tgaggattct 840
gacacctacc tgcacggtg ggccagagca ggccggtttg gcaccaaggg cttggctatc 900
acatttgtgt ccgatgagaa tgatgccaa atcctcaatg atgtgcagga tcgctttgag 960
gtcaatatta gtgagctgcc tgatgagata gacatctcct cctacattga acagacacgg 1020
tagaagactc gcccattttg gaatgtgacc gtctgtcctt caggagagga caccagggtg 1080
gggggtgaagg agacactact gccccacccc ctgacagccc ccaccccatg gcttccatct 1140
tttgcacac caccactcct gaacccccat ttctgatttg tcagaatttt tttttaacaa 1200
aactaaaaat gaaacacatg tgtctgtggt atctaaaaaa aaaaaaaaaa aaawwggtgg 1260
gsggcccgtc cccattggnc ct 1282

<210> 159
<211> 1505
<212> DNA

<213> Homo sapiens

<400> 159

```
ttacatgttg cagaagctaa ttgaagagac agataggttt gtagtggtca cagaagagga 60
atcaggcatg agtgaccagt tgtgtggcat tgctgcctgc cagacggatg acatatacaa 120
ccgaaaactgc cttattgaat tggccaacct gtcagatggt tcttcgtgga gcagagacak 180
aaggctgtgt catttgttca gctgccaaag cccaactgct gcagtgccag caccatccag 240
cctggtatgg tgatacattg aagcaaaaga catcctggac ttgcctcttg gatggcatgc 300
agtactttgc caccactgaa agcagcccca cagagcagga tggccgacag ctctgggttag 360
agggtgaagaa tatcgaggag caccggcagc gtagtctgga ctctgtgcag gagctgatgg 420
agagtgggca ggcagtgggc ggcatggtta ccacaaccac agattggaac cagccagctg 480
aggcacagca agcccagcaa gtccagcgga tcatttcgcy ttgcaactgc cgaatgtact 540
atattagtta cagccatgac attgatcctg aactagcaac tcagattaag ccacctgaag 600
ttcttgagaa ccaggaaaag gaagatctcc taaagaagca ggaaggggct gtggatacct 660
tcaccttat ccaccatgag ctggaaattt ccaccaaccc agctcagtat gccatgatcc 720
tggaactgt caacaacctg ctgctccatg tagaacctaa gcggaaggaa catagtgaga 780
agaagcaacg ggtcaggttc cagcttgaga tctctagcaa tccagaggag caacgcagca 840
gcatactgca tttgcaggag gctgtgcggc agcatgtggc ccaaatacga cagctggaga 900
agcagatgta ttctatcatg aagtctttgc aggatgacag caagaatgag aatctgcttg 960
acctgaacca gaagcttcag ttgcagctaa accaggagaa ggccaacctg cagctggaaa 1020
gtgaagaact gaatatcctc atcaggtgtt ttaaggattt ccaactgcag cgggctaaca 1080
agatggagct gcgaaagcac aagaagatgt gagtgtggtc cgtcgcactg agttttactt 1140
tgctcaggca cgggtggcgc tgacagagga agatggacag ctgggaattg ctgaattaga 1200
actgcagagg ttctctaca gcaagggtgaa taagtctgat gacacagcag aacatcttct 1260
ggagttgggc tggttttacca tgaacaacct cctccccaat gctgtctata aggtagtact 1320
gcggccccag agctcctgcc agtctgggcy acagctagct ctccgcctct tcagcaaagt 1380
tcggccccct gttgggggta tctctgttaa ggagcatttt gaggtaaagt tgggtgctctc 1440
accatccagc tgacacacca ttcttcaca gatgatgggc ttttctttcc tggccgaagt 1500
gtgga 1505
```

<210> 160

<211> 736

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (718)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (723)

<223> n equals a,t,g, or c

<400> 160

```
aggcacgagg gacacttggt gtctggacgc aacggcgggc ggagcatgaa cggccctcca 60
gccttcgagt cgttcttgct ctctgagggc gagaagatca ccattaacaa ggacaccaag 120
gtaccaaatg cctgtttatt caccatcaac aaagaagacc acacactggg aaacatcatt 180
aatcacgtg cctgcttccc ctctgccttc tgccgtgatt gtcagtttcc tgaggcctcc 240
ccagccacgc ttctgtaca gcctgcagaa ctgtgagtca attaaacctc ttttcttcat 300
```



```

aaattacceca gttttctcata gttctttata gcagtgtgaa aacagactaa tggacccttc 360
tggttgaagg aatgcagcca ttctgcttgt ttgactatgt cctttctatt catctctatt 420
tcctgggagg tgtttatcca agtgcaatag gaggtattgg tgaccgcaca gtccccctcag 480
tgttctgcta gtaaatagtt gaaggttgat cattgatctt ctgctgtttc agtctggcat 540
ggaaaagccc ctgtgcaact ggtaaagata tcaataagca cctgggtgggt ggcgggggta 600
gtccaggctt gtcttgcaac tgtatgttct cttcagaccc ctccctggcg atgccagatt 660
cactgggctg gcagattctg cccccccaa aaaaaaaaaa aaaatattaa taataaanaa 720
aanagactcc cagga 736

```

<210> 161

<211> 995

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (59)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (889)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (899)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (928)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (933)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (938)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (974)

<223> n equals a,t,g, or c

<400> 161

gggtcgaccc acgcgtccgg gcggcctcgg cagcgggtgtt ctcgcgcttg cgaasgggnc 60

```

tccggctcgg ctgcgggga ctgtgcacga ggttggcgac gcgccccgcc gggccccaga 120
tcaggccgca gagatcggga gccgcgggag cactaaggcg caagggccac agcagcagcc 180
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cggcgtcctc ttgcatcctg agtggtcgct ggccactggc tggagggtta agaagcggcc 540
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agagactggc atgactgctg ttccactcat tgatagtgtg gacccccatg gcttcattctc 660
ctaccgccta ttccgggacg ccacaagata catggatgga caccatgtaa aggatatttc 720
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cgaaccgtgc tgggagcatt atgccctngg ganggatnga ccccgctggg cggcttttgc 960
aaacagcggc aaancgggct tagaagcagg gagga 995

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<210> 162

<211> 1125

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (972)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1023)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1077)

<223> n equals a,t,g, or c

<400> 162

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gccctagtagt ggtccggaat tcccgggtcg acccacgcgt ccgccccacgc gtccgcgctg 60
gtgttgccggc gctggcgaca gtccgggttg cgagcggccc ggggcccgggg cggccagggc 120
cgctgcagga cgagaccctg ggtgtggcgt ccgtgccctc gcagtggagg gccgtccagg 180
gcatccgcgg ggagacgaaa agttgccaga cggccagcat tgccactgcc agtgcacccg 240
cccaggccag gaatcatgtg gacgcccagg tgcagacgga ggcccccgctg cctgtcagcg 300
tgcagccccc gtcccagtay gacataccca ggctcgcagc ctttcttcgg agagtggagg 360
ccatggtcat ccgagagctg aacaagaatt ggcagagcca cgcgtttgat ggcttcgagg 420
tgaactggac cgagcagcag cagatggtgt cttgtctgta taccctgggc taccgccag 480
cccaagcgca ggtctgcat gtgaccagca tctcctggaa ctccactggc tctgtggtgg 540
cctgtgccta cggccggctg gaccatgggg actggagcac gcttaagtcc ttcgtgtgtg 600
cctggaacct ggaccggcga gacctgcgtc cccagcaacc gtcggccgctg gtggagggtc 660
ccagcgtgt cctgtgtctg gcctccacc ccacgcagcc ctcccagtc gcaggagggc 720
tgtacagtgg tgagggtgtg gtgtgggacc tgagccgtct tgaggacccg ctgctgtggc 780

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gcacaggcct gacggatgac acccacacag accctgtgtc ccagggtggtg tggctgccc 840
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 tctggcargg catcggggta rgccagctgc agttcacaga rggcttcgcc tggttcatkc 960
 agcagctgcc anggagcacc aagctcaaga agcatccccg cgggagaccg aggtgggcgc 1020
 canggcaggc tttcttccag tttgacctca ggttttcatt ttggcaggaa gcggttnccg 1080
 ttcaattttc ctggcattgg agagcagcct taagggtgct ccatt 1125

<210> 163

<211> 423

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (390)

<223> n equals a,t,g, or c

<400> 163

gggtcgaccc acgcgtccga gatggcggtt cgcagcaaga ggccggagca cggcgggccc 60
 ccggagctgt tttatgacaa gaatgaagcc cggaaatacg tgcgcaactc acggatgatt 120
 gatgtccaga ccaaaatggc tgggcgagct ttggagctcc tttgtctgcc ggaggtcagc 180
 cctgttacct ctgggatatt ggctgtggtt ctgggctgag tggagattat ctctcgatg 240
 aagggcacta ctgggtaggc atcgacatca gccctgccat gctggatgcg gccttgacc 300
 gagacactga gggagacctg cttctggggg acatgggcca gggcatcccc ttcaaaccag 360
 kttcattgat ggatgtatca gcattctgcn aatcagtggc tctgtaatgc aaaccaagaa 420
 gtc 423

<210> 164

<211> 1642

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1614)

<223> n equals a,t,g, or c.

<400> 164

accacgcgt ccggcggtg gcggagcaga acggattgca gggtcagcca tgtcatctga 60
 gcctcccca ccaccacagc cccccacca tcaagcttca gtcgggctgc tggacacccc 120
 tcggagccgt gagcgctcac catccctctt gcsgggcaac gtggtcccaa gccactgcc 180
 cactcgccgg acgaggacct tctcggcgac ggtgcgggct tcacagggcc ccgtctacaa 240
 aggagtctgc aaatgcttct gccggtccaa ggcccatggc ttcattaccc cagctgatgg 300
 cggccccgac atcttctctg acatctctga tgtggaaggg gagtatgtcc cagtggaaag 360
 cgacgaggtc acctataaaa tgtgtctccat cccacccaag aatgagaagc tgcaggccgt 420
 ggaggtcgtc atcactcacc tggcaccagg caccaagcat gagacctggt ctggacatgt 480
 catcagctcc taggatggtg tggaagcacc ccttgtctctg tgcttgtggg agactttgcg 540
 gggaggaggc agcagacact ggagatgaca ttcttcaca cgagacgggg cttcagccgg 600
 gcattggtccc tctcaagtat ctcttgaggg aagggtatg gggggcagggt gtggggtgtg 660
 ggggtgtccc ggccatcagc acagcctatg accattgcaa caacctctca ccattctgaag 720
 agcattaaaa gcatttaaaa aggaragggtg cccactggtg gctgagtggg ggttccaacc 780

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ccatcccagg gagtggatca aggggtggtat ttctccagct gctcagacac atgggctcaa 840
cccacagaat cctcttcct cctggagctg gagggcccag attcccagat ctggccccct 900
ggcagcctga cagggacctt gcgtgacttc tccaaggcaa atttccacct aagtgccct 960
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aactaaagct ttcaccaga gccggctctg tttgcacttt gctgccgaca ttgcaaactt 1560
tttggcaggg tgggagactg agtctcatc tgtcamccag gctggagtgc agtngcccga 1620
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```

1642

<210> 165

<211> 1115

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (390)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (394)

<223> n equals a,t,g, or c

<400> 165

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aggaatgccg agtactgcag gggctcccca gggagtatgt gaatgccagg cactgtttgc 60
cgtgccaccc tgagtgtcag cccagaatg gctcagtgac ctgttttga ccggaggctg 120
accagtgtgt ggctgtgcc catcaagtgg atggcgctgg agtccattct ccgccggcgg 180
ttcaccaccc agagtgatgt gtggagtat ggtgtgactg tktgggagct gatgactttt 240
ggggccaaac ctacgatgg gatcccagcc cgggaggatc cctgacctgc tggaaaaggg 300
ggagcggtg cccagcccc ccatctgcac cattgatgtc tacatgatca tggtaaatg 360
ttggatgatt gactctgaat gtcggccaan attncgggag ttggtgtktg aattctccc 420
catggccagg gacccccagc gctttgtggt catccagaat gaggacttgg gccagccag 480
tcccttgagc agcaccttct accgctcact gctggaggac gatgacatgg gggacctggt 540
ggatgctgag gagtatctgg taccacagca gggcttcttc tgtccagacc ctgccccggg 600
cgctgggggc atggtccacc acaggcaccg cagctcatct accaggagtg gcggtgggga 660
cctgacacta gggctggagc cykctgaaag aggaggcccc cagggtctcca ctggcaccct 720
ccgaagggct ggctccgatg tattttratg tgacctggga atgggggcag ccaaggggct 780
gcaaagcctc cccacacatg accccagccc tctacagcgg tacagtgagg accccacagt 840
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tggggtcgtc aaagagtttt tgcctttggg ggtgccgtgg agaaccgccg gtattgacac 1080
cccaggggag ggagcttgcc cttcagcccc acctt

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1115

<210> 166
<211> 1066
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (10)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (739)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (968)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1023)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1025)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1042)
<223> n equals a,t,g, or c

<400> 166
gggcacgagn cacctgagcc ccttgtctcg caccggctcc caggagggca cctccatgga 60
gggctccccg cccgctgccc ctgccagagc caggcaccct caagaccagt ctggtggcta 120
ctccaggcat tgacaagctg accgagaagt ccaggtgtc agaggatggc accttgcggt 180
ccctggaacc tgagccccag cagagcttgg aggatggcag cccggctaag ggggagccca 240
gccaggcatg gagggagcag cggcgaccgt ccacctcatc agccagtggg cagtggagcc 300
caacgccaga gtgggtcctc tcctggaagt cgaagctgcc gctgcagacc atcatgaggg 360
tgctgcagggt gctggttccg cagtggagaa gatctgcatc gacaagggcc tgacggatga 420
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ccccatcctc atccgcaagt accaggccaa ctcgggcact gccatgtggt tccgcaccta 540
catgtggggc gtcattatc tgaggaaatgt ggacccccct gtctggtacg acaccgacgt 600
gaagctgtt gagatacagc ggggtgtgagg atgaagccga cgaggggctc agtctagggg 660
aaggcagggc ctgtgtccct gaggttccc ccatccacca ttctgagctt taaattacca 720
cgatcagggc ctggaacang cagagtggcc ctgagtgtca tgccctagag acccctgtgg 780
ccaggacaat gtgaactggc tcagatcccc ctcaaccctc aggctggact cacaggagcc 840

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ccatctctg ggctatgccc caccagagac cactgcccc aacactcgga ctccctcttt 900
aagacctggg ytcagtgtg gccctcagt gccaccact cctgtgtac ccagcccca 960
gaggcagnaa rccaatgggt cactgttgcc cctaaagggg ggtttttgaa ccaaggggga 1020
aanncacggg gcctggttcc cntttggaaa ggtttccctt gggaaa 1066

```

<210> 167

<211> 657

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (278)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (564)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (597)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (602)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (635)

<223> n equals a,t,g, or c

<400> 167

```

gtcgcgagcg ctgccgtcgg gaggcgctcc gaggttcgag gctgtgcccc gcgaccccg 60
cttcggcgct cggctcgcag gatggatccc gtaccggga cagactcggc gccgctggct 120
ggcctggcct ggctcgtcggc ctctgcaccc ccgccgcggg gkttcagcgc gatctcctgc 180
accgtcgagg gggcaccgcc agctttggca agagcttcgc gcagaaatct ggctacttcc 240
tgtgccttag ttctctgggc agcctagaga accgcanga gaacgtggtg gccgatatcc 300
agatcgtggt ggacaagagc cccctgccgc tgggcttctc ccccgctcgc gamcccatgg 360
attccaaggc ctctgtgtcc aagaagaaac gcatgtgtgt gaarctgttg cccctkggar 420
ccamggacac ggctgtgttt gatgtccggc tgagtgggaa gaccaagaca gtgcctggat 480
accttcgaat aggggacatg ggcggctttg ccatctggtg caagaaaggc caaggcccg 540
aggccagttg cccaaagccc cgangtcctc agcccgggac atgcaagggc ttctctntgg 600
angcagccag ccagcccaag ttaagggcgg gcctncttgg aagccggaca agcgttc 657

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<210> 168

<211> 1026

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1011)

<223> n equals a,t,g, or c

<400> 168

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ggcacgagga gagatggagg ggcggcaggt gctggaggctc aagatgcagg tggagtacat 60
gtcattcagc gcacacgcgg acgccaaggg catcatgcag ctggtgggcc aggcagagcc 120
gkagagcgtg ctgctggtgc atggcgaggc caagaagatg gagttcctga agcagaagat 180
cgagcaggag ctccgggtca actgctacat gccggccaat ggcgagacgg tgacgtgcc 240
cacaagcccc agcatccccg taggcatctc gctggggctg ctgaagcggg agatggcgca 300
gggggtgctc cctgaggcca agaagcctcg gctcctgcac ggcaccctga tcatgaagga 360
cagcaacttc cggctggtgt cctcagagca agccctcaaa gagctgggtc tggctgagca 420
ccagctgcgc ttcacctgcc gcgtgcacct gcatgacaca cgcaaggagc aggagacggc 480
attgcgcgtc tacagccacc tcaagagcgt cctgaaggac cactgtgtgc agcacctccc 540
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aggcaccaag gtgctgctgg tctcctggac ctaccaggac gaggagctgg ggagcttcct 660
cacatctctg ctgaagaagg gcctcccca ggccccagc tgaggccggc aactcaccca 720
gccgccacct ctgccctctc ccagctggac agaccctggg cctgcacttc aggactgtgg 780
gtgccctggg tgaacagacc ctgcaggctc catccctggg gacagaggcc ttgtgtcacc 840
tgcctgccc ggcagctgtt tgcagctgaa gaaacaaact ggtctccagg ctgtcttgcc 900
tttattcctg gttagggcag gtggtcctag acagcagttt ccagtaaaag ctgaacaaaa 960
aaaaaaaaaa aaaaaattgg gggggggccc gttaccatt tggcctttag nggggggttt 1020
aaatta

```

1026

<210> 169

<211> 774

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (730)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (733)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (754)

<223> n equals a,t,g, or c

<400> 169

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ggcataaaca tcgggtggtg ttcagatcct gctgccggca gctcgaggct aggatggctg 60
gagatgtgag ggcctttgtc tcatcacatc cgagcacagc tcagcaagat gctcttagct 120
agraaacaga ttttatgtgt taatgttaaa aattttgcag ttatttatct tgtggatatt 180

```

acagaagtgc ctgacttcaa caaaatgtat gagttatacg atccatgtac tgtcatgttt 240
ttcttcagga acaagcacat catgattgac ttggggactg gcaacaacaa caagattaac 300
tgggccatgg aggacaagca ggagatggtg gacatcatcg agacggtgta ccgcggggcc 360
cgcaaargcc gcggcctggt ggtgtccccc aaggactact ccaccaagta ccgctactga 420
ggcgccctca gtctgcgagg ataaatgtcg tggagccctt ttgtatgga aacgttttaa 480
gctatttaaa gccttttgaa aatacaggaa gctccagggc tggagcacct ctgagatgga 540
attgataaca tggctttaac tcaccgaaat aaacaagcac gtggtgagag gagcaggcct 600
acttgtttgt tctcaggaaa cttaatgaat agattactga ttttcctagt caaagttaat 660
tcttaccctt ggagtaaac gaagggtgtt atcctgtgag cctgtgcgtt ttgcatactg 720
ggttggtttn ctngggcttc ggtgacagca tatnccgcga gctgggcttt aaca 774

<210> 170

<211> 402

<212> DNA

<213> Homo sapiens

<400> 170

ggcacgagcg gcggtggggc ggacagccgg ggtgcgcact tgggcccccc tggccatggc 60
ggcgaagggtg gacctgagca cctccaccga ctggaaggag gcgaaatcct ttctgaaggg 120
cctgagtgc aagcagcggg aggaacatta cttctgcaag gactttgtca ggctgaagaa 180
gatccccgaca tgggaaggaga tggcgaaagg ggtggctgtg aagggtggagg agcccaggta 240
taaaaaggac aagcagctca atgagaaat ctccctgtc cgcagcgaca tcaccaagct 300
ggaggtggac gccatcgtca acgccgcaa cagctccccg ccccgaggga gcctaattaa 360
agatcttcgt tgtggcaaaa aaaaaaaaaa aaaaaaaaaa aa 402

<210> 171

<211> 796

<212> DNA

<213> Homo sapiens

<400> 171

aggcatcggg gacagccgct gcggcagact cgagccagct caagccccga gctcgcaggg 60
agatccagct ccgtcctgcc tgcagcagcc caacctgca caccacccat ggatgtyttc 120
aagaagggct tctccatcgc caaggagggc gtggtgggtg cgggtggaaa gaccaagcag 180
ggggtgacgg aagcagctga gaagaccaag gagggggtca tgtatgtggg agccaagacc 240
aaggagaatg ttgtacagag cgtgacctca gtggccgaga agaccaagga gcaggccaac 300
gccgtgagcg aggctgtggt gagcagcgtc aacactgtgg ccaccaagac cgtggaggag 360
gcggagaaaca tcgcggtcac ctccgggggtg gtgcgcaagg aggacttgag gccatctgcc 420
ccccaacagg agggtgaggc atccaaagag aaagaggaaag tggcagagga ggcccagagt 480
gggggagact agagggtac aggccagcgt ggatgacctg aagagcgtc ctctgccttg 540
gacaccatcc cctcctagca caaggagtgc ccgccttgag tgacatgcgg ctgcccacgc 600
tcctgccctc gtctccctgg ccacccttg cctgtccacc tgtgtgctg caccaacctc 660
actgccctcc ctgcgcccc cccaccctct ggtccttctg accccactta tgctgtgtg 720
aatttttttt ttaaatgatt ccaaataaaa cttgagccca ctyctaaaaa aaaaaaaaaa 780
aaaaaaaaag gggccc 796

<210> 172

<211> 478

<212> DNA

<213> Homo sapiens

<400> 172

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aattcggcag agcctgggtg cagggcagct aggggtctct gcattctcca catggtctca 60
tgcccccttt tgtcccctac aggaggactt gaggccatct gcccccaac aggagggtga 120
ggcatccaaa gagaaagagg aagtggcaga ggagggccag agtgggggag actagagggc 180
tacaggccag cgtggatgac ctgaagagcg ctcctctgcc ttggacacca tcccctccta 240
gcacaaggag tgcccgcctt gagtgacatg cggctgcccc cgctcctgcc ctctctctcc 300
tgggcacctt tggcctgtcc acctgtgtgt ctgcaccaac ctactgccc tccctcggcc 360
ccaccacccc tctgttcctt ctgacccccc ttatgtgtgt gtgaattttt tttttaaatg 420
attccaaata aaacttgagc ccactcctaa aaaaaaaaaa aaaaaaaaaa aaaaaaaa 478
```

<210> 173

<211> 656

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (59)

<223> n equals a,t,g, or c

<400> 173

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tttcccaatg cctgccacca cggagactca gggccacctg ccaccctccc tcgtgcctnt 60
ctgcccttgg gatggggcgc tcctgaatgt acgtggggcc cggtgtttac aaggagggtga 120
tcattctaaa cctctgccag aagcaggtgg ttgagaagat accactgccc ttttttgcca 180
tgtccctgag cctgtccccc gggacccacc tcctggctgt tggctttgct gactgcatgc 240
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tgcacctgtg cagggtttaca ccktccgcca ggctgctctt cacggccgcc cgcaacgaga 360
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acgcctggtc atgccaggca cctggacaca ggcttggcag aggcgccagg ttgtcaatgg 480
cctcatgtgt ggacaggcca ggattcacgt aaatcgccct gagcaagctg ttgtaaatgt 540
ggcgccctgt gaatactttc atacctgttg cccttttgcc taagaaatct ttaatgtttc 600
tatcttgtaa taaacatggg catttattgc aaaaaaaaaa aaaaaaaaaa aaaaaa 656
```

<210> 174

<211> 1891

<212> DNA

<213> Homo sapiens

<400> 174

```
gagccccctc cgagagggga gaccagcggg ccatgacaag ctccaggctt tggttttcgc 60
tgctgtgtgg ggcagcgttc gcaggacggg cgacggccct ctggccctgg cctcagaact 120
tccaaacctc cgaccagcgc tacgtccttt acccgaacaa ctttcaattc cagtacgatg 180
tcagctcggc cgcgcascgg gctgtcaggt cctcgacgag gccttcagc gctatcgtga 240
cctgcttttc ggttccgggt cttggcccc tccttacctc acagggaaac ggcatacact 300
ggagaagaat gtgttggttg tctctgtagt cacacctgga tgtaaccagc ttcctacttt 360
ggagtcatgt gagaattata ccctgaccat aaatgatgac cagtgtttac tcctctctga 420
gactgtcttg ggagctctcc gaggtctgga gacttttagc cagcttggtt ggaaatctgc 480
tgagggcaca ttctttatca acaagactga gattgaggac tttccccgct ttcctcaccg 540
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<210> 175

<211> 2161

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2153)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2160)

<223> n equals a,t,g, or c

<400> 175

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attaaggctg catatccaga tttggaaaat cctcctctgc tagtgacacc aagtcagcac 360
gccaagtttg gggactatca rtgtaatagt gctatgggta tttctcagat gctcaaaacc 420
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aatgaatgta ttgaaaaagt tgaattgctt ggtcctgggt ttattaatgt ccacttaaga 540
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<210> 176

<211> 2411

<212> DNA

<213> Homo sapiens

<400> 176

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<210> 177

<211> 1338

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1234)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1276)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1289)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1326)

<223> n equals a,t,g, or c

<400> 177

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gcagaatggc cttgcttgag gtttttgcaa atctctcggg tgtctggctt agtgggaggc 180
agctgggccc tcatactgc ctccgactt cagctgtttg acataaaccc agcttcgtgt 240

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gagtgaagg gaagggcctg gggaccctca gaggttctcg gaccacactt tgagaactcc 300
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caacanattt gaagcccc 1338

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<210> 178

<211> 1614

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature .

<222> (1213)

<223> n equals a,t,g, or c

<400> 178

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tgtactactg gtacctggtc accgagggcc agatcttcat cctcttcac ttcaccttct 180
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gggaaggac ccacaggaag tcacagtgggt gcccagggat gtgtcagccc ccagccacgg 1500
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aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 1614

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<210> 179

<211> 4292

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (654)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (4288)

<223> n equals a,t,g, or c

<400> 179

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aacagtcaaa cttatttttg taatgtatgt tattgtgtga tgcagttttt tgcttctgtc 4200
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aaaaaaaaaa aaaaaaaaaa aaaaaanaa aa 4292

<210> 180

<211> 243

<212> DNA

<213> Homo sapiens

<220>
<221> misc feature
<222> (235)
<223> n equals a,t,g, or c

<400> 180
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cagctcctcr cgccatcacc atcgccgcgc ccggttccac ctrccccaac agcccctgct 120
ccagagggaa gtgtgggtgtg tgggcacaac gggaaacgct aaccaggcac agagctcaac 180
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tat 243

<210> 181
<211> 813
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (266)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (723)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (726)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (738)
<223> n equals a,t,g, or c

<400> 181
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tggccaagga caactgggtg ctgtcctcgg agatcagtca ggtccgcctg tacactctgg 120
aggatgacaa gttcctctcc ttccacatgg agatgggtgt gcatgtggat gcagmccagg 180
ccttcctgct gctctcggac ctgmgtcaga ggccagagtg ggacaagcac taccggagcg 240
tggagctagt gcagcaggta gacranggac gacgccatct accacgtcac cagmcctgmc 300
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acgccagagt acagacgcgg agagaccctc tgctcaggct tctgcctctg gcgcgagggg 480
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tggcccgggg ggaggatgcc agcagcctgc ctatggytgc cagctgtgct gtgagcccag 660
cagcatggcc tgcactctgg aaggacaca gggtgtccag agcccctggc acaactgtg 720
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gggccagcct ggtggccaca gtgcacgtgg ggg

813

<210> 182

<211> 822

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (37)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (49)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (370)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (567)

<223> n equals a,t,g, or c

<400> 182

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ccgcgcctat caataaagtt gctcacttgt tgccggcccg ctgmcgcaa aggttgccg 180
cgcagmccga gaagtctcgc gatagccagc cgcggctgcc ctgcgcttc ccgagctggc 240
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aaaaaaaaat yggggggggg ccscakacca attkccctta ag 822

<210> 183

<211> 1095

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1082)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1094)

<223> n equals a,t,g, or c

<400> 183

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cctcaccgtg tccgcgctct tttcgcggat cttcggaag aagcagatgc ggattctcat 180
ggttggttg gatgcgctg gcaagaccac aatcctgtac aaactgaagt tgggggagat 240
tgtcaccacc atcccaacca taggcttcaa tgtagaaaca gtggaatata agaacatctg 300
tttcacagtc tgggacgtgg gaggccagga caagattcgg cctctgtggc ggcactactt 360
ccagaacact cagggcctca tctttgtggt ggacagtaat gaccgggagc ggggtccaaga 420
atctgctgat gaactccaga agatgctgca ggaggacgag ctgcgggatg cagtgtgtgt 480
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gnnggggggccc ccgna 1095
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<210> 184

<211> 3675

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2204)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3329)

<223> n equals a,t,g, or c

<400> 184

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ccctgcagac cctgcacctg cggagaccca gcgcacccag agcaacctgc ccaccagcct 180
ggagggtctg agcaacctc cagacgtgga tctgtcctgc aatgacctga cacgggtgcc 240
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ggagctgtcc ctgtgcatag accagtgggt gcacgtggaa actctgaacc tgtcccgaaa 360
tcagctcacc tcactgccct cagccatttg caagctgagc aagctgaaga agctgtacct 420
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gaattccaac aagctggact ttgacgggct gccctcaggc attggcaagc tcaccaacct 480
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 cccaaagctg aggaaacttg tcctgaacaa gaaccacctg gtgacctcc cagaagccat 600
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gatctagaac tagtc 3675

<210> 185

<211> 1040

<212> DNA

<213> Homo sapiens

<400> 185

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cccagcccac aatgaccag acctctagct ctcagggagg ccttggcggc ctaagtctga 180
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gccatctrct cagcactggt accccaggcg caggtgtccc cagcagtgga agagacggag 300
gcacaagcag agacacattt caaactgttc cccccaattc aaccaccatg agcctgagca 360
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tggtcagcct gaggttcaag tgtcggaaga gcaaggagtc tgaagatccc cagaaacctg 540
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aaaaaaaaa aaaaactcga 1040

<210> 186

<211> 817

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (26)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (31)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (76)

<223> n equals a,t,g, or c

<400> 186

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cggattaagc ctgatcaaga tgacaacctc ccaaaagcac cgagacttcg tggcagagcc 180
catgggggag aagccagtgg ggagcctggc tgggattggt gaagtcctgg gcaagaagct 240
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ccgggccccca tccctcaccc ccaccctcac tttcaatccg tttgatacca tttggctcct 720
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817

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<210> 187

<211> 1080

<212> DNA

<213> Homo sapiens

<400> 187

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cgacctgaac gcaaagtccc tgatggacga gacgcccctt gatgtgtgcg gggacgagga 180
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gaggcggtg agcctaacc agcgcaccga cctgtaccgc aagcagcacg cccaggaggc 360
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<210> 188

<211> 1286

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature
 <222> (1245)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (1254)
 <223> n equals a,t,g, or c

<400> 188
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<210> 189
 <211> 1738
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (1480)
 <223> n equals a,t,g, or c

<400> 189
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 ttctgtgcca atgaccgga ggtgtttgtt caggcggctc tcctggctca ggattactgt 360
 gacgccattg acctgaactt gggctgcccc cagatgatag ccaagagagg tcactatggc 420

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gcatcgctgc tgtgagccag gagctgaagc tgcggtgtca ggaggagata tccaggcagg 1020
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ccccaggac tgctgtgga gcctggacac gtcctactta agaaaatgcc ttttactcag 1560
ggaatctcct gctacttaat gtggaaagac acgcccattg ccccttcgc ccactctggg 1620
ggcctggaaa tgctgcagtg gggagcaggc ccaggctgg acctgccctg tcctcagcac 1680
gcgtgtgcaa aagtgaacaa taaatcattt caaagatgaa aaaamaaaa aaaaaaaa 1738

```

<210> 190

<211> 1923

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1829)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1875)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1910)

<223> n equals a,t,g, or c

<400> 190

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agcacatcaa atgccccac tccaagtacg ggtgcacgtt catcggaac caggacactt 60
acgagaccca cctggagact tgccgcttcg agggcctgaa ggagtttctg cagcagacgg 120
atgaccgctt ccacgagatg cagtggtctc tggcccagaa ggaccaggag atcgcttcc 180
tgcgctccat gctgggaaag ctctcggaga agatcgacca gctagagaag agcctggagc 240
tcaagtttga cgtcctggac gaaaaccaga gcaagctcag cgaggacctc atggagtcc 300
ggcgggacgc atccatgtta aatgacgagc tgtccacat caacgcgagg ctgaacatgg 360
gcatcctagg ctctacgac cctcagcaga tcttcaagt caaagggacc tttgtgggcc 420

```

```

accagggccc tgtgtggtgt ctctgcgtct actccatggg tgacctgctc ttcagtggct 480
cctctgacaa gaccatcaag gtgtgggaca catgtaccac ctacaagtgt cagaagacac 540
tggaggggcca tgatggcatc gtgctggctc tctgcatcca ggggtgcaaa ctctacagcg 600
gctctgcaga ctgcaccatc attgtgtggg acatccagaa cctgcagaag gtgaacacca 660
tccggggcca tgacaacccg gtgtgcacgc tggctcctc acacaacgtg ctcttcagcg 720
gctccctgaa ggccatcaag gtctgggaca tcgtgggcac tgagctgaag ttgaagaagg 780
agctcacagg cctcaaccac tgggtgctgg ccctgggtgg tgcccagagc tacctgtaca 840
gcggtcctta ccagacaatc aagatctggg acatccgaac ccttgactgc atccacgtcc 900
tgcagacgtc tgggtggcagc gtctactcca ttgctgtgac aaatcaccac attgtctgtg 960
gcacctacga gaacctcatc cacgtgtggg acattgagtc caaggagcag gtgctggacc 1020
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aagtcttcag tgcctctac gaccgggtcc tcagggtctg gagtatggac aacatgatct 1140
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cggscamtc cggggsctcc cctccctgct aggaggcaca ccctcagagg agctgcaagc 1800
ccgtggctgc ctgctacatg cctgcttnc acgtggctgc acgtgacac acccacattc 1860
accaaaccba cccngcccct gggacgcaac cacgccagga ggaggacacn ggccgcccag 1920
agc 1923

```

```

<210> 191
<211> 250
<212> DNA
<213> Homo sapiens

```

```

<400> 191
ccaagtgtgt tgatacatta agctatgaga catctaaaat aatgaaactt ggaacttagt 60
ggaacatgta catgttttca gcatacttaa acccaaaaat cattaatttt cagaacttaa 120
tcagtgcctt tacatttggt ttttctttta tgctagtgtg aaatggagga tgaaratata 180
attgrtgtgt tccaacagca gacgggrggt gtctactgaa aagggaacct gcttctttac 240
tccagaactc 250

```

```

<210> 192
<211> 1902
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc feature
<222> (1)
<223> n equals a,t,g, or c

```

```

<220>
<221> misc feature

```


<222> (8)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (19)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (763)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1898)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1900)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1901)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1902)

<223> n equals a,t,g, or c

<400> 192

ngggacgntg gtagaccanc gcgtaccgct gagtcaratt ttggcatcaa cttgaagggc 60
ccaaaaatba aaggaggtgc ggatgtttca gggggtgtca gtgccccara catcagcctt 120
ggtgaagggc atttragtgt taaaggttcc gggggtgagt ggaagggacc ccaagtctcc 180
tctgctctca acttgacac atctaagttt gctgggggcc ttcatttctc aggaccaaag 240
gtggaaggag gtgtgaaagg aggtcagatt ggactccagg ctcttgggct gagtgtgtct 300
gggcctcaag gtcacttgga aagtggatct ggaaaagtaa cattccctaa aatgaagatc 360
cccaaattta cttctcttgg ccgtgagctg gttggcagag aaatgggggt ggatgttcac 420
ttccctaaag cagaggccag catccaagct ggtgctggag acggcgagtg ggaagagtct 480
gaagtcaaac tgaaaaagtc caagatcaaa atgcccaagt ttaatttttc caaacctaaa 540
gggaaagggtg gtgtcactgg ctaccagaa gcatcaattt ctgggtccaa aggtgacctg 600
aaaagttaa agccagcct gggctctctg gaaggagagg cagaggccga agcctcttca 660
ccgaaaggca aattctcctt atttaaaagt aagaagccac ggcaccgctg caaattcatt 720
cagtgtgaa agagagttct ctggaccttc caccgacgac ggnacgctg agtttgaagg 780
tggggaagtg tctctggaag gtgggaaagt taaagggaaa cacgggaagc tgaaattcgg 840
taccttgggt ggattggggt caaagagcaa aggtcattat gagtgactg ggagcgatga 900
tgagacaggc aagttacagg ggagtggggt gtccctggcc tctaagaagt cccgactgtc 960
ctcctcttct agcaatgaca gtgggaataa ggttggcatc cagcttccc aggtggagct 1020

```

gtcagtttcc acaaagaaag agtagcaggc ctttgatgt gtgtacatat atatatatat 1080
aacaaaacat cagccttggg tgggtgtgttc ctatataaac tccaaaggga aacacaccga 1140
ctgcctcagc aatcatgcaa agaccttgcc tggcccgggtg gcaagcgtg aaaaaccgac 1200
cgccctgtagg ctccctggaac tatacagata ggtaaagagt tccaagttcg tccagcccat 1260
gtgcaaagtc aacagtattt gccttaagat ttcatatata tatatTTTTT tgcattgact 1320
gctgagagct cctgtttact aagcaagctt ttgtgtttat tctctcatt tttactgaac 1380
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agccagtttg gtgctgacgg tgagaggaaa ttagaatctg ttgcaaatt gtccaaccca 1680
ccccctcaac atgaggggct tccattttct gtgttttgta agggaactgt ttccttcatt 1740
ccgccatgtt cctgatatta gttctgattt ctttttaaca aatgttatca tgattaagaa 1800
aatttccagc actttaatgg ccaattaact gagaatgtaa gaaaattgaw gctgtacaag 1860
gcaaataaag ckgttattaa cctgaaaaaa aaaaaanan nn 1902

```

<210> 193

<211> 560

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (20)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (528)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (535)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (559)

<223> n equals a,t,g, or c

<400> 193

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ttttgcttaa agctatttan gtgacactat agaaggtacg cctgcaggta ccggtccgga 60
attcccgggt cgaccacgc gtccgggggt gcagacggag gtcagggtctt cctctttcct 120
gagactggat ctgttcaaac agcaaacgcc cacagatggc ccagaggtgg tggtagtcag 180
ggtgtgtggg tgtttttagg gttcttttagt gttgtttctt tcaccaggg gtggtgtccc 240
cagccagttt ggtgctgacg gtgagaggaa attagaatct gtttgcaaat tgtccaaccc 300
acccctcaa catgaggggc ttccattttc tgtgttttgt aagggaactg tttccttcatt 360
gccgccatgt tcctgatatt agttctgatt tctttttaac aaatgttatc atgattaaga 420
aaatttccag cactttaatg gccaattaac tgagaatgta agaaaattga tgctgtacaa 480
ggcaataaaa gctgtttatt aaccttgaaa aaaaaaaaaa aaaggggngg ccgcncccat 540

```

tgccctaggg ggggtaant

560

<210> 194

<211> 590

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (589)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (590)

<223> n equals a,t,g, or c

<400> 194

ctgcaggtac cgggtccggaa ttccgggtcg cccacgcgtc aggcggcggc gatgaccttc 60
 tgccggctgc tgaaccggtg tggcgaggcg gcgcggagcc tgccctggg cgccaggtgt 120
 ttccgggtgc ggggtctcgc gaccggggag aaggtcacgc aactggcca ggtttatgat 180
 gataaagact acaggagaat tcggtttgta ggctcgcaga aagaggtgaa tgaaaacttt 240
 gccattgatt tgatagcaga gcagcccggt agcgagggtg agactcgggt gatagcgtgc 300
 gatggcgggcg ggggagctct tggccacca aaagtgtata taaacttga caaagaaaca 360
 aaaaccggca catgcggtta ctgtgggtc cagttcagac agcaccacca ctagagcgtg 420
 tggcacgcg ggggtcccgc agcatcctgt gagcatttcc gcggggaagc tgagcacgtg 480
 aagctcgtg gttctgtgcg aagggtattc ctggtgctga ataaagggtg ttgctgtcaa 540
 gaaaaaaaa aaaaaaaaa aaaaaaaaa aaaaaaaaa aaaaaaann 590

<210> 195

<211> 691

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (10)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (579)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (618)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (639)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (657)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (672)

<223> n equals a,t,g, or c

<400> 195

```
attggcatcn tctgaaagcg ttttagacag gcagaatctc tgggtctcccc tctctgcatt 60
ccccaccag tgaatgaatg agaatctgca tttcttgaga tcataagaat actgacatac 120
agatgagata aaactcatgt gaatatcagt tttaaggctg gtgggttcatt tgttttgggc 180
atattgagtc aggattgact aatgaactgt agagggtttg cattatgcaa atgctcttaa 240
tttcttgat taggaattag acgctcccc ccaagtctta aataatgttt taatctgtat 300
ccttttatta taagaagatt agtaatatc tacagataat aacaacaact ggtatagtat 360
attttattta cattcttcat tcttaggaga aaatgctgag aagcttctgc agttcaagcg 420
ttgggtctgg tcaatagtag agaagatgag catgacagaa cgacaagatc ttgkttactt 480
ttggacwtca agcccatcac tgccagccag tgaagaagga ttccagccta tgccctcaat 540
cacaatawga ccaccagatg accmacatct tcctactgna aaataacttg atttcttgga 600
ctttaccttc cactctntt cctttaaaca ggattcttna aaccggaaat tgggtanctc 660
gccatttagg anccaaaaat tttgggtttt g 691
```

<210> 196

<211> 1772

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1749)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1769)

<223> n equals a,t,g, or c

<400> 196

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gnataatgct ggccattttg cctttctgac atttccttg gaactctgaa gaacctcccc 60
tttcccttcc cmcaataaga ccatttaagt gtgtgytaaa caactacrga atactaaata 120
aaaagtttgg ccaaaaccaa ccatgaagct gcaaagggtc ttgctcttac tstttcaaat 180
```

```

ttttgcaact ctartgtctc actttttaaag gaacagcttg attgcaaagg agaaaaataga 240
taagcaatga akttatctcc aacttcctaa aggcttatga cttctaaaaa gtgaatctat 300
cagcattcca catcagattt aaagcatcaa atgcctgtga aacagcaaag atgggtgaag 360
attgtgctca ttatgtttgt ggagtgtgta ttgattcaca gtagataacg ctggcagtaa 420
gagaaatcaa atgctaagag ttgttgaagc agaaggcggc tgattgttgg taagtcagtg 480
cagttgcata agcagtgtctg tcagaattgg tttggtgcag gcaatagatt ttgccttcaa 540
gggttcctgt ggatctcagg aaggcatcag tgttgattaa cactcataac tagggagtga 600
stggtagtta cttaagtaat tgaccaaag gaaaagggga agtaattaag gaaattggta 660
agtggaggta gtcaggargt tctygtggtt cttacayag attttacagc tttggstttc 720
attttgttta gctaaagtca tggggacaac tcttcaattt agaacttaag ttgaattata 780
aaaatgatgg atataagtgg tagctgtatc tagtgaagtg tctgtcagta agtgaacat 840
tttttggtgg tggcttatcc acaaacagtt tagttgtaga ataaaactta tgagtgcacat 900
ctggaaagta accatgctaa gatggcaagc aactggaaa caattaggcc acttggttt 960
cttttgctgt attgttttat aagcctactt tacctcccag tcttggaac aagttttagt 1020
tttttattgg tttggagact agagccaata gtataatgtt ctcaaaggaa acagacttga 1080
gttggtggat tagaggaaact aacccaactt atatgatttt tttttgttt ttgtcgtgta 1140
gttatggcac tgtcttattt ggaacatttg caactaggga taatacaaca tttttaactc 1200
tcatttgaca acctactact aatcacagac cacaagggtg atgaccaaat ttatgtggtt 1260
tttgcactcc atagtgtct tagcccaatc tttctatact cttacgatta cttgggttaa 1320
cgcyctgtg aggaccttct ggctcttgag ataccctaaa tatttaagat atttagatat 1380
cttgaagata gtataggata tagagattgt accaaatagg aatataagga gtatgttaa 1440
atgaccagat acctgtttga tagtttactg acctagcaga tgtgtggaaa aggaatcaga 1500
tcttgattct tctgggttta tactgggttg aaaacagaat gatacagaaa atgttttctt 1560
tgtttaactg gtagttgaac atagaacttg ggtattatag atcacttttc acttttttga 1620
atgttttgta ttgaaactta ataaaacttt aacatggcaa aaaaaaaaaa aaaaaaaaaa 1680
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1740
aaaaaagana aaaaaaaaag ggggggcnc cc 1772

```

<210> 197

<211> 675

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (657)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (671)

<223> n equals a,t,g, or c

<400> 197

```

accacgcgt ccggacttcc tcttcgttaa gtcggccttc ccaacatggc gcagtctatt 60
aacatcacgg agctgaatct gccgcagcta gaaatgctca agaaccagct ggaccaggaa 120
gtggagttct tgtccacgtc cattgctcag ctcaaagtgg tacagaccaa gtatgtggaa 180
gccaaggact gtctgaacgt gctgaacaag agcaacgagg ggaaagaatt actcgtccca 240
ctgacgagtt ctatgtatgt ccttggaag ctgcatgatg tggaacacgt gctcatcgat 300
gtgggaactg ggtactatgt agagaagaca gctgaggatg ccaaggactt cttcaagagg 360
aagatagatt ttctaaccac gcagatggag aaaatccaac cagctcttca ggagaagcac 420

```

```

gccatgaaac aggccgtcat ggaaatgatg agtcagaaga ttcagcagct cacagccctg 480
ggggcagctc aggctactgc taaggcctga gagtttttgc agaaatgggg cagagggaca 540
ccctttgggc gtggcttcct ggtgatggga agggctctgt gttttaatgc caataaatgt 600
gccagctggg caraaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaccccnggg 660
ggggggcccg nacc 675

```

<210> 198

<211> 557

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (451)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (461)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (464)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (488)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (492)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (495)

<223> n equals a,t,g, or c

<400> 198

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tttaggtgac acgtatagaa ggtcgcctgc aggtaccggw ccggaattcc gggtcgaccc 60
acgcgtcccg gaacacaaga tgccgaaggg aagaaggcga aggggaagaa ggtggccccc 120
gccccgcgct tcgtgaagaa gcaggaggcc aagaagggtg tcaaccgct gttcgagaag 180
cgccccaaaga acttcggcat cggtcaggac atccagccca agcgggacct gacgcgcttc 240
gtcaagtggc cgcgctacat ccggtgcag cggcacgcgc gatcctctac aagcggctga 300
aggtgccgcc cgccatcaac cagttcacgc aggcgctgga ccgccagacg gccacgcagc 360
ttgcttgaag ctggcgacaa attaccggcc cgagacgaag caggagaaga agcagcggtt 420
gttggcccg gcggaagaaga aarcggccgg ncaaggggga nttncgaac aagcggsgcc 480
cgttgtnttc gnaancgggg ttgaaaacgg ttcaacaagt tggttgaga acaagaaggc 540

```

gccattgggtt cggtatt

557

<210> 199

<211> 2611

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (3)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2549)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2560)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2585)

<223> n equals a,t,g, or c

<400> 199

tcncgggtcg acccacgcgt ccggcgagga gtaccttacc aacttgcccc acatggacat 60
 cgacaaggac tggaggcccc gctgtacctc acccccgagg gctgggtccct cttcctccag 120
 cgctactacc aagtgggtcca cgaaggggca gaactcaggc acctcgacac tcagggtccag 180
 cgctgtgagg acatcctgca gcagctgcag gccgtggtac cccagataga catggaagg 240
 gatcgcaaca tctggatcgt gaagccagga gccaaagtccc gcggacgagg catcatgtgc 300
 atggaccacc tggaggagat gctgaagctg gtgaacggca acccgtggt gatgaaggac 360
 ggcaagtggg tgggtgcagaa gtatatgtag cggcccctcc tcattcttgg caccaagttt 420
 gacctcagac agtgggttcct ggtaactgac tggaaccacac ttaccgtgtg gttctaccgc 480
 gacagctata tccgcttttc caccgagccc ttctccctga agaacctgga caactcagtg 540
 cacctgtgca acaactccat ccagaagcac ctggagaact catgccatcg gcatccactg 600
 cttccgccag acaacatgtg gtctagccag aggttccagg cccacctgca ggagatgggt 660
 gccccaaatg cttgggtccac catcatcgtg cctggcatga aggatgctgt gatccacgca 720
 cttcagacct ccaggaacac cgtgcaatgt cgggaaggcca gctttgagct ctatggcgct 780
 gacttcgtgt tcggggaggga cttccagccc tggtctgattg agatcaacgc cagccccacg 840
 atggcaccct ccacagcagt cactgcccgg ctctgtgctg gcgtgcaagc tgacaccctg 900
 cgctggttca ttgaccggak gctggaccgc aactgtgaca caggagcctt tgagctcatc 960
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 ctgccaccac ttcagcccc ggaaggggga agaaagccga ggtatcagga agtttaagga 1260
 agttgcccaa gggtgcacag ctgagaagg gcacagctgg gatgcagacc cagcccgta 1320
 ccacttcccc agcctccaca ccaaggccca gctgccttct ccccatgtac tccgacacca 1380

```

gggccaggtc ctcagacgac agcacagcaa gctggtgggc actaaggccc tgtcgaccac 1440
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tgatttcaag gtggcaccca gcatcctgaa gccaaagaaag gtgggcctcg acctgtgact 1560
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gagcactggg agcccccaa ccccagagaa caagccaagc tagcagaatg acacctaccg 2400
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tytgagaag gcatkgtct atcccttctt cagcaaagg gcaaggtcac taaaaatgaa 2520
catccataag ccacaaccac tggagaaant tttgactgn ttagttagt tggttgaatg 2580
tgggnccccg gaaagagatg ttacttgga c 2611

```

<210> 200

<211> 2316

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2280)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2282)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2302)

<223> n equals a,t,g, or c

<400> 200

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ggcacgagga aacatggagt cctgtaggca aggtcttacc tgaatcagga tgaggagtg 60
gtgggtccag gtggggctgc tggccgtgcc cctgcttgct gcgtacctgc acatcccacc 120
ccctcagctc tcccctgccc ttactcatg gaagtcttca ggcaagtttt tcacttaca 180
gggactgcgt atcttctacc aagactctgt ggggtgtggtt ggaagtccag agatagtgtg 240
gcttttacac ggttttccaa catccagcta cgactggtac aagatttggg aaggtctgac 300
cttgaggttt catcggtga ttgccctga tttcttaggc tttggcttca gtgacaaacc 360
gagaccacat cactattcca tatttgagca ggccagcatc gtggaagcgc ttttgccgga 420
tctggggctc cagaaccgca ggatcaacct tctttctcat gactatggag atattgttg 480

```



```

tcaggagctt ctctacaggt acaagcagaa tcgatctggt cggcttacca taaagagtct 540
ctgtctgtca aatggaggta tctttcctga gactcaccgt ccactccttc tccaaaagct 600
actcaaagat ggaggtgtgc tgtcacccat cctcacacga ctgatgaact tctttgtatt 660
ctctcgaggt ctcaccccag tctttgggcc gtatactcgg ccctctgaga gtgagctgtg 720
ggacatgtgg gcagggatcc gcaacaatga cgggaactta gtcattgaca gtctcttaca 780
gtacatcaat cagaggaaga agttcagaag gcgctgggtg ggagctcttg cctctgtaac 840
tatccccatt cattttatct atgggccatt ggatcctgta aatccctatc cagagttttt 900
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ccactatcca cagctagagg atcccatggg cttcttgaat gcatatatgg gcttcatcaa 1020
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gtgtattcca cttaggaaga aatgcccana agaggtcctg gccatcaaac ataattctct 1140
cacaaagtcc actttactca aattggtgaa cagtgtatag gaagaagcca gcaggagctc 1200
tgactaaggt tgacataata gtccacctcc cattactttg atatctgac aaatgtatag 1260
acttggcctt gttttttgtg ctattaggaa attctgatga gcattactat tcaactgatgc 1320
agaaagacgt tcttttgcac aaaagacttt ttttaacact ttggacttct ctgaaatatt 1380
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atacccttac tctgccagag tagtgaagct aattaaacac gtttggtttc tgaataaatt 1740
gaactaaatc caaactattt cctaaaatca caggacatta aggaccaata gcatctgtgc 1800
cagagatgta ctgttattag ctgggaagac caattctaac agcaataaac agtctgagac 1860
tcctcatacc tcagtgggta gaagcatgtc tctcttgagc tacagtagag gggaagggat 1920
tggtgtgtag tcaagtcacc atgctgaatg tacactgatt cttttatgat gactgcttaa 1980
ctccccactg cctgtcccag agaggctttc caatgtagct cagtaattcc tgttacttta 2040
cagacaggaa agttccagaa actttaagaa caaactctga aagacctatg agcaaatggt 2100
gctgaatact ttttttttaa agccacattt cattgtctta gtcaaagcag gattattaag 2160
tgattattta aaattcggtt ttttaaatga gcaacttcaa gtataacaac tttgaaactg 2220
gaataagtgt ttattttcta ttaataaaaa tgaattgtga caaaaaaaaaa aaaagggccn 2280
gncccgtttt aaaagggatc cnaagcttta ccgtac 2316

```

<210> 201

<211> 1147

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (5)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (6)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (11)

<223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (12)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (19)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (1145)
 <223> n equals a,t,g, or c

<400> 201
 cgcannccac nnggtggang ccgctctaga atatggatcc cccgggactg cagggagtc 60
 aaggtacagt cgccgcgtgc ggagcttggt actggttact tggcctcatg gcggtccgag 120
 ctctggtcga gaacaactgt gagatcggt gctttgcca gtcaccaac acctactgtc 180
 tggtagcgat cggaggctca gagaacttct acagtgtgtt cgagggcgag ctctccgata 240
 ccatcccggt ggtgcacgcg tctatcgccg gctgccgcgt catcgggcgc atgtgtgtgg 300
 ggaacaggca cgggtctctg gtaccaaca ataccaccga ccaggagctg caacacattc 360
 gcaacagcct ccagacaca gtgcagatta ggcggtgga ggagcggctc tcagccttgg 420
 gcaatgtcac cacctgcaat gactacgtgg ccttgggtcca ccagacttg gacagggaga 480
 cagaagaaat tctggcagat gtgctcaagg tggaaagtctt cagacagaca gtggccgacc 540
 aggtgctagt aggaagctac tgtgtcttca gcaatcaggg agggctggtg catccaaga 600
 cttcaattga agaccaggat gagctgtcct ctcttcttca agtccccctt gtggcgggga 660
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 tctgtggcct ggacacaacc agcacagagc tgtcagtgtt ggagagtgtc ttcaagctga 780
 atgaagccca gcctagcacc attgccacca gcatgcggga ttccctcatt gacagcctca 840
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 ccacattccg cccaatctgt accgatgctt ggcaggaggg tggcagagag ctcactggga 960
 ctgaggggct gggcacccaa cccttttcca cctgtgctta tcgcctggat ctatcattac 1020
 tgcaaaaacc tgctctgttg tgctggctgg caggccctgt ggctgctggc tgagggttct 1080
 gctgtcctgt gccaccccat taaagtgcag ttccctccgg aaaaaaaaaa aaaaaaagg 1140
 cggcnac 1147

<210> 202
 <211> 688
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (477)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (684)

<223> n equals a,t,g, or c

<400> 202

```
acgtaccggt ccggtaatc ccgggtcgac ccacgcgtcc gctcggcggg cgctgttgag 60
ggagtcgggc cgcgactgtg gtcgttttta taccttcccg cgcggacgcc ggcgctgcca 120
acggaagggc gggtaggacg gagtttcgtc atgttgacca ggcccatttg agatctttga 180
agatatcctc aacgtgaggc tctgctgcca tgaaggtaga gattaagtgc tggaacggcg 240
tggccacttg gctctgggtg gccaacgatg agaactgtgg catctgcagg atggcattta 300
acggatgctg ccctgactgc aaggtgcccc gcgacgactg cccgctgggtg tggggccagt 360
gtccccactg cttccacatg cattgcatcc tcaagtggct gcacgcacag cagggtgcagc 420
agcactgccc catgtgccgc caggaatgga agttcaagga gtgaggcccc acctggntct 480
cgctggaggg gcacccctgag actccttcct catgctggcg ccgatggctg ctggggacag 540
cgcccctgag ctgcaacaag gtggaacaa gggctggagc tgcgtttgtt ttgccatcac 600
tatgttgaca cttttatcca ataagtgaat actcattaaa ctactcaaat cttaaaaaaa 660
aaawaaawaa atctcggggg gggnccccg                                     688
```

<210> 203

<211> 304

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (269)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (287)

<223> n equals a,t,g, or c

<400> 203

```
aaatgtgaaa actaaggcct tgcaagccta tggttcacc aggggtagga tcaggcacct 60
taactctaga gccattctc ctaaccactg agccatgatt gtcttacaat tttgaatact 120
gcaaaactgg aagaattgtc tggctattat ctaagctgtt cataagctgg aacaagtaga 180
tctgagggta agaggagttc tgttttaact aggactgagt ttcaaataga gatgtttcag 240
actatagagg gggaaaaaat gcckgggang tccataaatc taagccngtt tcatggatgt 300
tttt                                     304
```

<210> 204

<211> 417

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (380)

<223> n equals a,t,g, or c

<400> 204

```
gggtcgaccc acgcgtccgc gcgggcgggg acggagctcg gcgtgcttgc tgctggaggg 60
```

```

tgatggccct gcaaggctgt gggctccgac ctcaccggga gtcgamarcg agaggttcgc 120
cgaagagcga ggttctgggc gagcgctgaa cgcgggcccc aagcaccocg ggtctttaca 180
cagtccgcgt ccacagactc tgacgaagac gtggatctgc tctcgcttta gctgctcgcg 240
gtcctccaga tcatgtccgc gactcctgcg actccgcgcg gaaaaaaaaag ttgcccaggc 300
gtggactcaa tgacytttcc aastgtgcgc ctccgtgcct ggaccgggtt gagcgcggtt 360
gcccaagttg aactttttgn ggggaggggt ttctctaagg gctgttgtct caatggg 417

```

<210> 205

<211> 551

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (450)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (458)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (471)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (484)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (519)

<223> n equals a,t,g, or c

<400> 205

```

gggtcgaccc acgcgtccga ctagttctag atcgcgagcg gcccgccctt tttttttttt 60
tttttttttt tggtttccag agtttggtt tattttgcag tacagaaatc atctggagcc 120
gtctgagaca gacatccctg aagcggaggc tctgtcaaata caatactgcg tcgcacttrg 180
tccgttgagg aagccacacc tggggtacaa aagaagcttc tacgtttacc cgctgtacca 240
cggatttctt tcccctttgc tcttaccaat ttaccaggt gaaaacaccg cacagaggct 300
tccctcggaa tgacgctcgc gtctggagtt gggtagaat tgtgggcccc cgtagacccc 360
acctgtggct gtgtccctg gccctgtcct aaacagctga cgggacacag acgtagaggg 420
gcggggccac gcagggatgc gtgtcccaan tcacgganta tctggtgggc ntcgcaatgg 480
ccantgggac agatggcacg tgaaaggggc cgttccggnt ctcaagcggc agaagcacia 540
gaccgcggag g

```

551

<210> 206

<211> 1101

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (21)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (479)

<223> n equals a,t,g, or c

<400> 206

```
tcccggtcg acccacgcgt nccgcccgt ggaggctgga gcttccgggc cctggaaagg 60
ggccccgcg cgcgccgggt cggaggcaga cccctgggtt tgggggacat gggcatttgg 120
ggcgccctgaa cccaagacct ctggatgagc tgccccgttc agaccatgga tcctgaggtg 180
accttgctgc tgcagtgcgc tggcgggggc ctgccccagg agcagataca ggccgagctg 240
agccccgccc atgaccgtcg cccactgcca ggtggggacg aggccatcac tgccatctgg 300
gagaccggc taaaggccca accctggctc ttcgacgccc ccaagtccg cctgcactca 360
gccaccctgg cgcctattgg ctctcggggg ccacagctgc tcctgcgcct gggccttact 420
tcctaccgag acttcctggg caccaactgg tccagctcag ctgcctggct gcgacasang 480
ggtgccaccg actggggtga cacgcaggcc tatctggcgg acccactggg ggtgggcgct 540
gcactagcca cagccgatga cttccttgy ttcctgcgcc gctcccgga ggtggctgag 600
gcccctgggc tgggtggacgt acctgggtgg caccctgagc ctcaggccct gtgccctggt 660
ggcagccccc agcaccagga cctcgtctgg cagctggtgg tacatgaact cttttccagt 720
gtccttcagg agatctgtga tgaggtgaac ctgccgtgc tcaccctgag ccagcccctg 780
ctgttkggca tcgccgaaa tgagaccagt gctggccgag ccagtgccga gttctatgtc 840
cagtgcagcc tgacttctga gcaggtgagg aagcactacc tgagtggggg acccgaggcc 900
cacgagtcta caggaatctt ctttgtggag acacagaacg tgcggagatt gcccgagacg 960
gagatgtggg ctgaactctg cccctcgcca aaggcgccat catcctctac aaccgggttc 1020
aggggaagtcc cactggagcg gccctaggtt cccagccct actcccgccg ctctgaaaaat 1080
aataaacgac ttattcttg g 1101
```

<210> 207

<211> 515

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (428)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (439)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (449)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (456)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (474)
 <223> n equals a,t,g, or c

<400> 207
 gggctcgaccc acgcgtccgc ccacgcgtcc ggcr gataga gcgccatgaa ggcctcgggc 60
 aactgcgag aatacaaggt ggtggggcgc tgcctgccca ccccaaatg tcgcactccg 120
 ccgctgtatc gcatgcgaat ctttgcaact aatcacgtgg tcgccaagtc ccgcttttgg 180
 tactttgtgt ctcagctgaa aaagatgaag aagtcctcag gggaaatcgt ctactgtgga 240
 caggtgtttg agaaatcccc cttgcgagtg aagaacttcg gcatctggct gcgctatgac 300
 tcgagaagcg gtacccacaa catgtaccgg ggagtaccgg ggacctgacc amcgcgggcg 360
 ccgtcaccca gtggttaccg agacatgggc gcccgacacc gttgcccag cgcattcgat 420
 tccagatnct tgaagtggna ggagattgnc agccancaat tgccgcggg ccancattca 480
 agcatttcca aggattccaa gatcaattcc cattg 515

<210> 208
 <211> 269
 <212> DNA
 <213> Homo sapiens

<400> 208
 aagcattgtg ggtaaaggcc tggaggcagg aaagtgaagg acaatttcaa gaaactcagt 60
 tcatcaattt tcatcaacac cttcctgggc catgcctggg tactgagraa cccagccctg 120
 aatctggaca tcattttccc ttccagagca tagaatgcag ggggatccag ggaatgggtt 180
 aacagaagag gaagctggwt caaggagacc ttgctgtacc aggtgaaggt gtttgaactt 240
 tgttcttgca ggcaggcaga gcacggaca 269

<210> 209
 <211> 734
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (278)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (732)
 <223> n equals a,t,g, or c

<400> 209

```
cgactggttg ttaccgagga agatggcggc gccagaccgc aggcgctagg gaagatcgca 60
ccgcggacgc ccgctgagct tggcgcacgg gccgaccagg agctggtgac tgcctcatg 120
tgtgatttgc ggcggccagc ggcaggtggg atgatggact tggcctacgt ctgtgagtgg 180
gagaaatggt ccaagagcac ccactgccc tgggtgcccc tggcctgcgc ctggtcctgc 240
cgaaatctca tcgccttcac catggacctg cgcacgantg accaggacct gaccgcatg 300
atccacatcc tggacacgga gcacccctgg gacctgcact cgatccccctc agagcaccac 360
gaggccatca cctgcctgga gtgggaccag tcaggctccc ggctcctgtc agcagatgcc 420
gacgggcaga tcaagtgtg gagcatggcg gaccacctgg ctaatagctg ggagagctca 480
gtgggcagcc tagtggaggg ggacccatt gtggccctgt cctggctgca caatggtgtg 540
aaactggccc tgcacgtgga gaagtcgggc gcctccagct tcggggagaa gttctccga 600
gtcaagttct caccygttct cacgtgttc ggcggaagc catggagggc tggatcgcg 660
tgacggtcag cggcctgtc accgtgtccc tgctgwaasc agcgggcagg tgctgacgtc 720
caccgagagc tntt 734
```

<210> 210

<211> 658

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (561)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (567)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (577)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (580)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (636)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (654)

<223> n equals a,t,g, or c

<400> 210

```

ccccccagcg ttgaggttta tcacgacagc ctgtgccgaa aaatctggcg tgaggatgat 60
aaatggcatg tcatttttcg tgacagcggc tgggagcaac atattaccgc ccgctatctg 120
gtcggtgccg atggcgcaaa ctcgatgggtg cggcgacatc tctaccgga tcatcaaata 180
cgtaaatatg tcgctatcca gcagtgggtc ggggagaaac atccgggtgcc gttctactcc 240
tgcatctttg ataattcgat aactaactgt tattcatgga gtatcagcaa agacggktat 300
tttatctttg gcggtgccta tccaatggaa agacggtcag acgsgtttca sgacgcttra 360
agagaaaatg agcgcctttc agttccagtt tggtaagacg gtgaaaagcg aaaaatgcac 420
gggtgctggt tccctcgcgc tggcaggatt ttgtctgcgg taaggacaac gcctttcttg 480
attgggtgaac ggcgggattt atcagcgcca gctcgctgga agggattagc tatgcgctgg 540
atagcacaga catttctgcg ntcgtgntac tgaacancn gagaagctca ataccgttac 600
tggcgcgcca cccgaaactg ggttaaactc ttcgnaaga tataaaaagc catnctga 658

```

<210> 211

<211> 204

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (91)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (94)

<223> n equals a,t,g, or c

<400> 211

```

attcgagag ccatctctga cagttagagc cgatatcact ggaagatatt caatcgtctc 60
tatgcttacg acctgcagat acagtctgtt nttncacatg aagaaagtct caagttgctg 120
aagactgaat tgtaagaaaa atctccagcc cttctgtctg cagcttgaga cttgaaccag 180
agagtgtgag agctgctggt ggag 204

```

<210> 212

<211> 1271

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1222)

<223> n equals a,t,g, or c

<400> 212

```

ttccgcagcc ttgccccagc ccactcccc tctcacccta ccacagagca tggtaaatac 60
caagcccagag aagacggagg aggactcaga ggaggtgagg gagcagaaac acaagacctt 120
cgtggaaaaa tacgagaaac agatcaagca ctttggcatg cttcgccgct gggatgacag 180
ccaaaagtac ctgtcagaca acgtccacct ggtgtgcgag gagacagcca attacctggt 240
catttggtgc attgacctag aggtggagga gaaatgtgca ctcattggagc aggtggccca 300
ccagacaatc gtcattgaat ttatcctgga gctggccaag agcctaaagg tggacccccg 360
ggcctgcttc cggcagttct tcactaagat taagacagcc gatcgccagt acatggaggg 420

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cttcaacgac gagctggaag ccttcaagga gcgtgtgctg ggccgtgcca agctgcgcat 480
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cctggacccc gtcgaggtct acgagtcctt ccctgaggaa ctccagaagt gcttcgatgt 600
gaaggacgtg cagatgctgc aggacgccat cagcaagatg gacccaccg acgcaaagta 660
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ccaataaaag atttcagatg cnaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaacaaaaa 1260
aaaaaaaaa g 1271

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<210> 213

<211> 1025

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (991)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1007)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1019)

<223> n equals a,t,g, or c

<400> 213

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atgaagcaga aagagcgga gctgcgactg ctcatgcttg gcctggacaa tgcaggaaag 180
acaaccatcc tgaagaagt caatggggag gacatcgaca ccactctccc aacgctgggc 240
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caccactggt gcatccaggg ctgcagcgcc gtcaccgggg agaacctgct gccgggcac 600
gactggctcc tggatgacat ttccagccgc attttcacag ctgactgaac cactccagat 660
gccccccacc tagcagtcca ggtccctcaa ccttcaccaa aactaccca tgggggggtg 720
ggagtcagcc ggccaaacta aactccccc tctccaccc cagcctgctg ctgctactgc 780
tgcccgctgc tgctctgtgg ccaccggct cccatggcg gagggtgtg ccctggctgt 840

```

```

ctctctggct cctgacctgg cctttggcta ccataccaag aagagagggc tgggcgggga 900
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accgctcctt gccccgmaaa aaaaaaaaaa naaaaaaaaa aaaaaanccc ggggggggnc 1020
ccgga                                         1025

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<210> 214
<211> 351
<212> DNA
<213> Homo sapiens

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<220>
<221> misc feature
<222> (332)
<223> n equals a,t,g, or c

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<400> 214
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aataaaaaag atcaacaaaa tgggtattgt tctcatacta tgataaagac atacttgaga 180
accgcattat ttatggggaa aagaagtta attgactcac agttccacag gctgtacagg 240
aggcatggct tagggaggcc tcagggaaac ttagratcca tgggtggaagg tgkargagga 300
agcatgcacc atcttcactg gccagagcag gnggagagag agcaaatttg g          351

```

```

<210> 215
<211> 1087
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc feature
<222> (1075)
<223> n equals a,t,g, or c

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```

<400> 215
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gtcgggagga gccacctgag gagcctgagc agtgcccggc cattgacagc caagcccag 180
cgggcagcct ggacttggtg cccggcgggc tgaccttga ggagcactcg ctggagcagg 240
tgacgtccat ggtggtgggc gaagtgtca aggacatcga gacggcctgc aagctgtca 300
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acatctycca gcgscctcgtc taccagttcg tgcaccccat ctgagtgcct ggcccagggc 900
ctgaaacccg cctcagggg cctctctcct gcctgcccct cctcagccag gccctgagat 960
gggggaaaac ggcagtctgc tctgctgtc tgaccttcag agcccaaggt caaggagggg 1020

```

caaccaactg cccaggggga tatgggtcct cttggggcct tcgggaccct ggggncaagg 1080
ggctttc 1087

<210> 216

<211> 1977

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (8)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (11)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1873)

<223> n equals a,t,g, or c

<400> 216

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agcgagggca gggagagaag tcagccacgc cctcacgga gattctggac cctaactg 180
gggagccagc tcccggtgctg tccctcccac ctctgcaga cgtctccacc ttcctggctt 240
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<210> 217

<211> 2815

<212> DNA

<213> Homo sapiens

<400> 217

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gcttccaact agttaaatgc ccttgagcgc gggtttccgc ggcccggctc ttccgccccg 180
cggcgcgagt tgagccggtt ccccgcgctg tccgcgcggg cgctccgaca gcggtctcgc 240
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tgtagctaca tagttatctg tgtacatcca cgtgggggca tttttctcct gcttaatgag 360
gacttgactc gggagcaagt gtgaatcatt gccggggctg ggaaaggagg aaggcgcatt 420
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ccggctcctgg ggctgctgct gctgttgacg acgacgacga cgacgggggc tgccctctgct 540
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taaacgtttt ctttctgcaa cctgtactta cagattcttc ctgtaaacta aataaaaaaa 2760
aatgatagt gcaaaaaaaa aaaaaaaggg cggccgctcg cgatctagaa ctagt 2815

<210> 218

<211> 1645

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (347)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1643)

<223> n equals a,t,g, or c

<400> 218

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tgcccggtt tgctggccca gcaagcctga taagcatgaa gctcttatct ttggtggctg 120
tggtcggggtg tttgctgggtg cccccagctg aagccaacaa gagttctgaa gatatccggt 180
gcaaatgcat ctgtccacct tatagaacaa tcagtgggca catttacaac cagaatgtat 240
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<210> 219

<211> 478

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (344)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (415)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (452)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (469)

<223> n equals a,t,g, or c

<400> 219

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cgggtttggg gctgccgcca tcatgccggg gatagtggag ctgcctactc tggaggatct 120
gaaagtgcag gaggtgaaag tcagttcttc ggtgctcaaa gctgccgccc atcactatgg 180
agttcagtgt gacaagccca acaaggagtt catgctctgc cgctgggaag aaaaagaccc 240
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gataaagcct tcaactgtga gagcctttta cagactattg gacntgcac gactactccg 360
gcctgcagtg ttttcgtcgc tgccgcaaac agcaggccaa tttgacgatg tgtgnggggc 420
aactgggatg gtgcggctga actggggaaa angtccagc caccaaatng aaaacagt 478

<210> 220

<211> 832

<212> DNA

<213> Homo sapiens

<400> 220

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cagccctccc cttgtgtttc aaccaatcgg aagtgaattt aactagatgt agtaaccttt 180
tttttcttta cttctaaaaa agttacagtt tactaataaa gttaagtctg gttctgtcct 240
agaggaaata aattcactat taattcatgt cttaagttac ttgggttaaa acactttcag 300
ccaccagat taattaaagt ggagcagtgg agccctggc tgggagatgg cctccagagg 360

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tcctctgtgg tcaactgact actgcgtatc gcagtggaaat aagactgcac agttgctggt 540
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<210> 221

<211> 1892

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1892)

<223> n equals a,t,g, or c

<400> 221

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gacagtcagc cactcagcc ctgtgcattt ctactacagg accgactgtg attcctccac 780
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1892

<210> 222

<211> 868

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (23)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (31)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (45)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (829)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (860)

<223> n equals a,t,g, or c

<400> 222

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ccctgtggc cgtgtccacc actgtgtcac ctgtgtgtgc tgcagcccca gccaaagtgtg 780

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aagcaaagga agagtcggag gaawcggatg agagkattkt camttcgana atcagcaaaa 840
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<210> 223

<211> 1516

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1493)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1497)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1508)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1509)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1516)

<223> n equals a,t,g, or c

<400> 223

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cgatggggat ggaagaggag atgcctgtga tgatgacatg gatggagatg gaataaaaaa 180
cattctggac aactgcccc aatttcccaa tcgtgaccaa cgggacaagg atggtgatgg 240
tgtgggggat gcctgtgaca gttgtcctga tgtcagcaac cctaaccagt ctgatgtgga 300
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ggacagcaca gacaactgcc ccaccgtcat taacagtgcc cagctggaca ccgataagga 420
tggaattggt gacgagtgtg atgatgatga tgacaatgat ggtatcccag acctggtgcc 480
ccctggacca gacaactgcc ggctggtccc caaccagcc caggaggata gcaacagcga 540
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tatatattht aacttcaatt ttctttagct ttaccaacc caaatatatc aaaacgttht 1440
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<210> 224

<211> 1306

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

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<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (887)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1242)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1264)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1303)

<223> n equals a,t,g, or c

<400> 224

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gctggacgag gtcatggctg ccgctgcnst tacaagcctg tccaccagcc ctctccttct 180
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ccgcctggtg cacctgggga ggcaggcaga gcctgatcag agtgatggtg aggaggactt 540
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ccctgtcctg agcaccgttg ctaacccccca gtcctgtcac agtgaccgtg tctaccaggg 780
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tttttgact aaaagccaaa acaaacggg gttcccttta gncccaagg ggccttgggg 1260
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<210> 225

<211> 584

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (486)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (542)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (562)

<223> n equals a,t,g, or c

<400> 225

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ggcagaaaty gcscagtga tgcrytgat catcaayacy ttctactcga acaargagat 180
cttcttgagg gactgatctc caactcgtcc gacgctcygg acaaaatccg atacgagagc 240
ctgaccgacc ccagcaagct cgactcgggg aaggagctgc acattaacct catcccgaac 300
aagcaggacc ggaccctcac catcgtggga taccgggata gcatgacca ggcgacctg 360
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gcgggagcag atatttcyat gattggccag ttcggggctg ggttctattc ggcctacttg 480
gtggcnagaa ggtgacggg atcaccaagc acaacgatga cgagcattac gcctgggagt 540
cntccgcagg ggctcgttca angttccgca ttgacacagt gaac 584
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<210> 226

<211> 523

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature
 <222> (34)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (498)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (514)
 <223> n equals a,t,g, or c

<400> 226
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 gaccatgcc aagcacagtg tgatctcctg gggcccgga tggtgacat gtgcaagaac 180
 tatatcaacc agtattcggg cattgccgtc cagatgatga tgcacatgca acccaagag 240
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 cctgccaaag cgggtctcaga gaacgtcatc cctgcattgg aactggtgga gcccataag 360
 aaggacacgg tccaggcaaa gaccagtgtt agctgtggag atatgagagt tacgtggtt 420
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<210> 227
 <211> 2377
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (2369)
 <223> n equals a,t,g, or c

<400> 227
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 ggtccaagtc caagtccctg tcggtctcca gatctcggtc gcggtccagg tcccgggtctc 180
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 cgtgttaatg taagaatgac tcctatcatt aggagtgtc ctggagggtt actcaccttt 420
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 ggctgtttcg taaactgttt gagacctatt aatgaaaatg actatttctt gctgttttta 540
 tccaacgtct gcattttccc cttttaaagc tgcggtctcc tgtttgataa aagaatattg 600
 gccagtattg cagattttta ctgatttggc tgatcctcca gggaccagtt tctgtgggag 660
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 tgcaataaga agcagtgaac atttgaacc ccaaagaaa gttacaggta ttgcaactgg 840
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tgtaagtact tataacatgg tgtatctttt tgcattatga tttctgtat tataaccatt 2280
gtttctgtag ttttaattaaa acattttctt ggtgttagct tttctcagaa aaaaaaaaaa 2340
aaaaaaaaaa aaaaaaaaaa aaaaaaang aaaaaag 2377

<210> 228

<211> 463

<212> DNA

<213> Homo sapiens

<400> 228

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acaatatgac tcctccttta cttcatcatg acttgaagac tcagaatatc ttattggaca 180
atgaatttca tgtaagatt gcagattttg gtbtatcaaa gtggcgcagt atgtccctct 240
cacagtcacg aagtagcaaa tctgcaccag aaggaggagc aattatctat atgccacctg 300
aaaactatga acctggacaa aaatcaaggc ccagtatcaa gcacgatata tatagctatg 360
cagttatcac atgggaagtg ktatccagaa aacagccttt tgaagatgtc accaatcctt 420
tgcagataat gtatagtgtg tcacaaggac attggactgg tat 463

<210> 229

<211> 1232

<212> DNA

<213> Homo sapiens

<400> 229

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catggagaaa ctccgggcac agtgccctgtc ccgcggggcc tcgggcatcc agggcctgac 180
caggtttttc cgccaactag accgggacgg gaggagatcc ctggacgctg atgagttccg 240

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gcagggtctg gccaaactcg ggctggtgct ggaccaggcg gaggcagagg gtgtgtgcag 300
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ataaaaatag caggtaacac gtcaaaaaaa aa 1232

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<210> 230

<211> 1063

<212> DNA

<213> Homo sapiens

<400> 230

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tcggtcagcc aacgcagagg atgctcagga attcagtgat gtggagagg ccattgagac 180
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ctgagaactc cctctggaat tcttgggggg tgttggggag agactgtggg cctggaaata 480
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<210> 231

<211> 1063

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1056)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1061)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1063)

<223> n equals a,t,g, or c

<400> 231

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cctataatgc aagaaccaag gcgagtcacg ccctgtctgg gcaaaagagg agtaaagacc 300
cctcagctgc agcccggcag cgcattccta ccaggggtcc gccgccagag ctttcccgcg 360
cggtcgggata gttacactac tgtccgggac ttcctagccg tgccgcggac catctcaagt 420
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<210> 232

<211> 1474

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1337)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1359)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1377)

<223> n equals a,t,g, or c

<400> 232
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<210> 233
<211> 1782
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (8)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (31)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (34)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (591)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1760)

<223> n equals a,t,g, or c

<400> 233

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caaagcctgc tgggtgagca ccttgctcat tatactggwt ctgaatttac ctctttgaag 180
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<210> 234

<211> 2208

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1314)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2189)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2202)

<223> n equals a,t,g, or c

<400> 234

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<210> 235

<211> 2580

<212> DNA

<213> Homo sapiens

<220>
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<222> (1)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (3)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2558)
<223> n equals a,t,g, or c

<400> 235
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<210> 236

<211> 3008

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (3001)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3008)

<223> n equals a,t,g, or c

<400> 236

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<210> 237

<211> 877

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (834)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (854)

<223> n equals a,t,g, or c

<400> 237

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<210> 238

<211> 3039

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (170)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (177)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3039)

<223> n equals a,t,g, or c

<400> 238

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3039

<210> 239

<211> 1992

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1)

<223> n equals a,t,g, or c

<220>

<221> misc feature

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<223> n equals a,t,g, or c

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<221> misc feature

<222> (13)

<223> n equals a,t,g, or c

<220>

<221> misc feature
<222> (29)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (87)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1989)
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<400> 239
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aaaaaaaaanc cc 1992

<210> 240

<211> 497
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<213> Homo sapiens

<220>
<221> misc feature
<222> (387)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (476)
<223> n equals a,t,g, or c

<400> 240
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attgaccatt ttggagc 497

<210> 241
<211> 316
<212> DNA
<213> Homo sapiens

<220>
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<222> (133)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (311)
<223> n equals a,t,g, or c

<400> 241
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tgttcaacga tgnaatctgt ggataatacg cacatttcgc cggaagtggg atccggttag 180
ccaraaagca ggcaggacgt gatggatatt gtatttatag agcaactttc ggtaatcacc 240
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tggcgtgggg ntaacc 316

<210> 242
<211> 829
<212> DNA

<213> Homo sapiens

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<222> (1)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (4)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (14)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (47)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (793)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (809)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (814)

<223> n equals a,t,g, or c

<400> 242

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aaaaaaagat cttcaaagg gcagatgggt agaaggcata acctctgagg gttaccatta 180
ctattatgat cttatctcag gagcatctca gtgggagaaa cctgaaggat ttcaaggaga 240
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atgaaatagt gatattctggc tgggtgcagt ggctcatgcc tgtaatcca gcactttggg 480
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aacagtgagc cgagattgca ccaccgcact ccagcctgga taacaaagta agactccgtc 720
tcaaaaaaaaa aaaaaaaaaa agggcgggccg ctctagagga tccctcgagg ggcccaagct 780
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<210> 243

<211> 838

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (32)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (51)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (822)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (832)

<223> n equals a,t,g, or c

<400> 243

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gtacttgaat agttacagca tatgtttgaa caggaagtag gaacatgcat acacgaagaa 240
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gattcggatg ctttatttat agtaactgaa gctaataatg ttttatgttt tgattttttg 600
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tggttttgtc atattagttt tttttgcaag tagttatgta aaagagatag ataataaaa 780
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<210> 244

<211> 2853

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2665)

<223> n equals a,t,g, or c

<400> 244

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<210> 245

<211> 1197

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (218)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1193)

<223> n equals a,t,g, or c

<400> 245

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<210> 246

<211> 848

<212> DNA

<213> Homo sapiens

<400> 246

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ggcgtgttcg cgcaggctga cggctcggcc tacattgagc agggcaacac caaggcactg 180
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aaaaaaaaa 848

<210> 247

<211> 1336

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (26)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1336)

<223> n equals a,t,g, or c

<400> 247

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aaaaaaaaaa aaaaan 1336

<210> 248

<211> 1076

<212> DNA

<213> Homo sapiens

<400> 248

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<210> 249

<211> 2425

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (52)

<223> n equals a,t,g, or c

<400> 249

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tacacagcgc ctagagcagc gggcgagga gttgcaacag acgggtgtgc tgggtgcctt 540
tgagagcagc ttctggcaca tgacaggagaa gctgggcatt gtgcagggca tcgtaggtgc 600
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2425

<210> 250

<211> 1408

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (252)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1387)

<223> n equals a,t,g, or c

<400> 250

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cgagcccagc ctggccgtgt cagcgccggg ccgcgtgcaa cctcatcggg gaacacacgg 180
actacaacca gggcctgggt ctgcctatgg ctctggagct catgacgggt ctgggtggga 240
gcccccgcaa gnatgggctg gtgtctctcc tcaccacctc tgagggtgcc gatgagcccc 300

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gtgcagtggt ggtcagctca gtgcccttg gggtggcct gtccagctca gcatccttg 480
aagtggccac gtacacctt ctccagcagc tctgtccaga ctggggcaca atagctgccc 540
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<210> 251

<211> 494

<212> DNA

<213> Homo sapiens

<400> 251

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gccagccaag gacagggtgg actgcggcta ccccatgtc accccaagg agtgcaacaa 180
ccggggctgc tgctttgact ccaggatccc tggagtgcct tgggtgttca agccccctga 240
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cctttgctcc cggcaagcgc ttctgctgaa agttcatatc tggagcctga tgtcttaacg 420
aataaaggct ccatgctcca ccgaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 480
aaaaaaaaaa aagg 494

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<210> 252

<211> 2491

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (6)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (16)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2457)

<223> n equals a,t,g, or c

<400> 252

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<210> 253

<211> 1125

<212> DNA

<213> Homo sapiens

<400> 253

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<210> 254

<211> 1409

<212> DNA

<213> Homo sapiens

<400> 254

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tagtatattt attaaaagtg gtagtcatt 1409

<210> 255

<211> 490

<212> DNA

<213> Homo sapiens

<400> 255

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gggccctttg 490

<210> 256

<211> 1233

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (45)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (602)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (931)

<223> n equals a,t,g, or c

<400> 256

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<210> 257

<211> 2404

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2372)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2385)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2395)

<223> n equals a,t,g, or c

<400> 257

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2404

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<210> 258

<211> 2092

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (4)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (27)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (31)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (60)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2069)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2071)

<223> n equals a,t,g, or c

<400> 258

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attaaaactc aaaaaaaaaa aaaaaaaanc naagggggg gcccggtccc ca 2092
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<210> 259

<211> 387

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (377)

<223> n equals a,t,g, or c

<400> 259

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actgaaaaaa aaaaacnogg ggggccc 387
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<210> 260

<211> 3712

<212> DNA

<213> Homo sapiens

<400> 260

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<210> 261

<211> 897

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (22)

<223> n equals a,t,g, or c

<400> 261

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<210> 262

<211> 1905

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1266)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1791)

<223> n equals a,t,g, or c

<400> 262

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19
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<210> 263

<211> 1424

<212> DNA

<213> Homo sapiens

<400> 263

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<210> 264

<211> 1287

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (111)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (889)

<223> n equals a,t,g, or c

<220>
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<222> (1196)
<223> n equals a,t,g, or c

<220>
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<222> (1229)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1284)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1287)
<223> n equals a,t,g, or c

<400> 264
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ccgtcccgcg gcccccagcc gcccacaacc ctgcccacag ggcccggcgc catgagttag 180
ctggagcaac tgagacagga ggccgagcag ctccggaacc agatccggga tgcccgaaaa 240
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cagatgagga cccggaggac cctccgtggg cacctggcaa agatctatgc catgcactgg 360
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ccacctgtgc cctgtgggac attgagacag gccagcagac agtgggtttt gctggacaca 720
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tccctgccct tccaaccaag tttngtn 1287

<210> 265
<211> 991
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature

<222> (421)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (966)

<223> n equals a,t,g, or c

<400> 265

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ggcagactga acggctgcac caggagggca cactggctcc ccctatactg gagctgcggg 240
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caaggactgc ccccatgtcc gggagaaggg ctccgggaag cagaacaagg acctctatga 540
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aaaaanaaaa aaaaaaaaaa aaaaaaaaaa a
991
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<210> 266

<211> 2320

<212> DNA

<213> Homo sapiens

<400> 266

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cggcctgcgc ccggcccggc catggcgggc ccccgcccgt ctcccgcat ctccgtttcg 180
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cccaccagt ggcactcca ttcagttcca agtccagtac caagcctgca gccgggggca 720
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tccagaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa
2320

```

<210> 267

<211> 423

<212> DNA

<213> Homo sapiens

<400> 267

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aggrgagctc tggaggggtg acatccccct gaagctcgtg atgatcggtg gcatcgattg 180
tkaccatgac atgacagctg ggcggaggtc aatcgagga tttgttgcca gcatcaatga 240
agggatgacc cgctggttct cacgctgcat atttcaggat agaggacagg agctggtaga 300
tggtgtcaaa gtctgcctgc aagcggtctt gagggcttgg aatagctgca atgagtacat 360
gccagcccg atcatcgtgt accgsgtggc gtaggagacg gccagytgaa aacactggtg 420
act
423

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<210> 268

<211> 1846

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1776)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1816)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1832)

<223> n equals a,t,g, or c

<400> 268

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tcactcagag gaaaaatgaa aaggaacaag aaagaagatt gcagcaggca gtgttaagca 180
gacagatgcc gtctgaaagc ttggaccagc cgttcagtcc tcggatgccg tcctctgggt 240
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gtgtctttat gcctcgacct caagctgtgg gctcttccaa ttatgcttcc accagtgccg 420
gactgaagta tcctggaagt ggggctgacc ttctcctcc ccaaagagca gctggagaca 480
gtggtgagga ttcagacgac agtgattatg aaaatttgat tgacctaca gaccttcta 540
atagtgaata ctcacattca aaggattctc gacctatggc acatcccgac gaggaccca 600
ggaacactca gacctccag atttaactaa acaaaagaaa ctctccacct agcactgttt 660
ttcttcattg cttactgaga gggtttttga gaacttaatc tggggggaga actgctttct 720
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tagccctgag gtagttcatg aaaatgctgt gcactncatt ccatgggaat gaaatgttgg 1800
aaagctgac ttttcnggat ataaaatgtt gnatgatgaa aaaaaa 1846
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<210> 269

<211> 601

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (536)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (556)

<223> n equals a,t,g, or c

<400> 269

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gtctcatact ctacaccagt attgctgtcc tactcaggtc cttgactcca tgaagcttac 180
cccctcaggc aggctggcag agagcaggga agaggaggag gaggaggaga ctgaggaaga 240
ggaagaggaa gacgctcacc agttctgctg tccggcctcc gagtgcagta gtccctcctc 300
tcggtaactg agaggacaag ggccattttc tatgcagaag caaaagcctt aaccagsccc 360
tccttcccc caccacccc cccgcagatt ccccatggg accctgtccc ctgcttcagg 420
aaccagatgg gcaagcatcg tgccccttcc tccccccacc ttcttcttgg aattcccatc 480
cccactgctg tctcctctgg actccagccc ctgaattaaa gaaactggag ccctangtcc 540
gactaaaatt tggganaagc aaacttggac ttggacttgg aactggatcc tcccgtagcc 600
g 601
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<210> 270

<211> 880

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (876)

<223> n equals a,t,g, or c

<400> 270

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aatacaagct gcagcctctt tcctcgtttc tagtctcaga aggaaggaga gggaagccat 240
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aatctattct gtatccacca ggtggcagca tcttgtcata cgtgtcagga cttaggactg 480
cgggggttag gttagatgtc acggaaaaag ctagttctgt ggtcaggcgg caccaatgag 540
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ttgaagacct actttgtcct ctacataggg tagcttctgt cagggaatct tggttcttcc 660
caagaaacac tgattttctt tcaggagagac ttcatgtgtt catttatttc caccacagca 720
gattttaaga aattataata tgtaatat ttgatatata aagagtatat ctaacgtgaa 780
taaattatga agcatactaa tgagtaccta tgaccataa cacatatata ttaaacatt 840
ttaaatacca aaaaaaaaaa aaaaaaaaaa aaaaanaaaa 880
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<210> 271

<211> 2484

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (194)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (623)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2396)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2484)

<223> n equals a,t,g, or c

<400> 271

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cgatcaagtt ccttcccatt tctccatctg ggggatcctg aacgtgcaca tcctcagaga 180
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cacagacttc gtgcgcggct gancgcggtg ggctgtggg yttctgctgc ttcttgtccg 660
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gagtcttgct catgtgaagg gcgccaatgc cggggtccaa accttcctgg gaattccatt 780
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tgtaatttc cccgtttttt ggggn
2484

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<210> 272

<211> 751

<212> DNA

<213> Homo sapiens

<400> 272

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caaggtcaag aaatcccaca gtttgatgta ttaaagaaat gacttatttc tactcaaat 660
aaatggcatt gaagtctttc tttaaccctt tatgagttaa tttaataata atgatctgag 720
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751

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<210> 273

<211> 3309

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (3279)

<223> n equals a,t,g, or c

<400> 273

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agccacagca agccctgtcc ctttgccgga tccccaaaca ctagagaagc tctcctaacc 240
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gagcttttag gtgttgagat ggggcagctc tgaatcctag accctggaat agcctgtccc 480
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gtggttacac agttgacctc tgcctggctc ccccttggtg caactcctgc ctccatcccc 600

```

```

cttgctgggg tccctcatc cacttgaggg cgcctgaggg ccaggarcag caggcaagga 660
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caagtacact ccacacatgc ataaaggaaa tcaaatgtta tttttaagaa aatggaaaat 3240
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<210> 274

<211> 843

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (780)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (833)

<223> n equals a,t,g, or c

<400> 274

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cactcccacg accagtgacc aggagttaaa ctttgggatg tgcccgtgat gttggaccac 180
aaggacttag aggccgaaat ccaccccttg aaaaatgaag aaagaaaatc gcaggaaaat 240
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tcccgggtgc gagcggcggc gttttttctt tcattgtttc tctgcctttt tgtggtgttc 360
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gactacagtg ccgctgttat ctatgacttt ctggctgtgg atgatataaa cggggacagg 480
atccaagatg ttctttttct ttataaaaac accaacagca gcaacaattt cagccgatcc 540
tgtgtggacg aaggcttttc ctctccctgc acctttgcag ctgctgtgtc gggggccaac 600
gcagcacgct ctgggagwga cctgtggccc aagacgtggc cctcgtggag tgtcgtgtgc 660
cccagccaag aggcagtgag gcacctctct cctgcacctt ggtgggcaga cccagttctt 720
tcattgcagt caacttggtc acaggggaaa ccttggaac cacagccagc agttcagggn 780
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tgt 843
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<210> 275

<211> 2028

<212> DNA

<213> Homo sapiens

<400> 275

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ttgaacctct ttatagcatt gatactaggt gaacagaaat tacctgacta ataatttgtc 180
taacatcata tatcagaatt ttattgtata tgatgaacaa aacttaaaat tttttaaat 240
taattyttaa atactgtttc agagttctaa aaaggcagtt ttttaaaaaa cttaagttga 300
taaaaaactgt aagaataatt tagcagaaat agaaccagaa tgtagaagag tagtcatgta 360
acagcagtaa taacatactt cagcttccat ataggaatag aagtggtaga gccaaaagt 420
atthaggaag agttataagg tacagggtga gtatcccttt tccaaaaatg cttgggacaa 480
gaagtatttc agatttcata atttttttca aagtttgga tatttgcatt atacttacca 540
gttgggcatc ccaaacttga aatctgaaat gttccatgag catttccttt gagtgtcatg 600
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agtgtggagt cataaactta agttcttcat atagtacaa gagtccttag agattgttat 900
tcaagttcct tagaaattgt tatttaggta taatatcatc ttgtctttga ctagagcttg 960
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<210> 276

<211> 1455

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (759)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1408)

<223> n equals a,t,g, or c

<400> 276

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tggcccarcc cgtgccgcag gactggagga agatggcaga agctgttcaa aatcacgtga 420
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```

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ctcagaagat cctggtggac tcccgggaag ccacctctgt gccccacatc tacgccattg 1080
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tggctggacg agatgcatcc cagtgttatg taaagatggt gtgcctgagg gagccccac 1380
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ctggggacaa gtgtg                                     1455

```

<210> 277

<211> 1923

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1814)

<223> n equals a,t,g, or c

<400> 277

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aggctgggct ttgnatattt acacaggaaa gttgggtaac actagaaata attacttggt 1860

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gga 1923

<210> 278

<211> 1380

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1293)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1297)

<223> n equals a,t,g, or c

<400> 278

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<210> 279

<211> 1018

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (818)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1017)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1018)

<223> n equals a,t,g, or c

<400> 279

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```

<210> 280

<211> 1192

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1105)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1130)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1154)

<223> n equals a,t,g, or c

<400> 280

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tccgggaatt cccgggtcga cccacgcgtc cgctctgttt atatagcagg tgtcacaaact 60
aacttgtctt tagccttggt gctttgatcc ttctatatTT tgaccccaaca ggtgtggtcc 120
ggtttactta atcaggacat gggcctaaga acaaaccttt tcccttcatg ataacatcca 180
tagacaactt attagaaggg actagagttt ttgcaaattt ccctgctgga tggggcctat 240
agctatactt agtatatgcc taaacatggt aattggatag taaatggttt tctagtcca 300
ttgtgtgata ttgacctaaa tggacttggt ttcaaattat ttcttcaatt gtcatagata 360
atcctgtacc aaatggggaa gaattaggaa ataatcatgt tgtctaattg tactctggat 420
tcagggcagc aactgccatt taaatgttgt cttgttcatt tctaaatctg ttccatgaag 480
tttaggtttt ccctgaaact aagtTgaatt atttccaaaa tgaaacaggc ttctcaggga 540
catatccact tcttcccagt ctgcctttgg attaaagcac caagcagaga ccacattaat 600
tccctttgct atactgtgat ccttagtatg ttaattctta agaaaccaac atatcactga 660
aagaaggctg gcagaacgca agtgcatTTT ttactgtgg gaagaaagat caagtgaagt 720
attatttttt cctgggtgtc acttaatggg ctgagtaaaa agcttgaaaa ctcagacttt 780
cggctcttgg tctgccactc attggttatg aggaggcca gagcaggtaa gttcaccttc 840
ctggccttac ttctctgatg tgtaatacgg aattacttca cagtagcatg acagtataag 900
acaccagcag tagatacaac tatgatgaca ttccatgagt tggattttt agttctaact 960
gctaaaattg ttctctttac gggacagatt tctaataaag tgcttggctt taaaatacat 1020
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ttatttttaa atttttaata ctttnggtac tccaattgtc cagtgtccn tgggtgttgt 1140
attttttatt tttnggggat agtggggggg ccttaagggg gaggagggat ag 1192

```

<210> 281

<211> 1755

<212> DNA

<213> Homo sapiens

<400> 281

```

aaattacagg aacggagtaa gaacgtaaga aatcgcaaag cactggaacg tatgggaatc 60
tcaactgttct tggcccttct cccgaccgt agccctgctc tgctacgact gcgtgggtga 120
agtcgtctat aaaaactcat ctctgcgct ctcttcgcca cattcgcttc ctgcttcgg 180
tgtgtctgtt gtgtcttgtt gcgggcaccg cagtcgccgt gaagatggcg tctaccagcc 240
gtttggatgc tcttccaaga gtcacatgtc caaaccatcc agatgcgatt ttagtgagg 300
actacagagc cggatgatag atctgtcctg aatgtggctt ggtgttaggt gaccgggtta 360
ttgatgtggg atctgaatgg cgaactttca gcaatgacaa agcaacaaaa gatccatctc 420
gagttggaga ttctcagaat cctcttctga gtgatggaga tttgtctacc afgattggca 480
agggcacagg agctgcaagt ttgacgaat ttggcaattc taagtaccag aatcggagaa 540
caatgagcag ttctgatcgg gcaatgatga atgcattcaa agaaatcact accatggcag 600
acagaatcaa tctacctga aatatagttg atcgacaaa taattttattc aagcaagtat 660
atgaacagaa gagcctgaag ggaagagcta atgatgctat agcttctgct tgtctctata 720
ttgcctgtag acaagaaggg gttccttaga catttaaga aatatgtgcc gtatcacgaa 780
tttctaagaa agaaattggt cgggtgttta aacttatttt gaaagcgcta gaaaccagtg 840
tggatttgat tacaactggg gacttcatgt ccaggttctg ttccaacctt tgtcttcta 900
aacaagtaca gatggcagct acacatatag cccgtaaagc tgtggaattg gacttggttc 960
ctgggaggag ccccatctct gtggcagcgg cagctattta catggcctca caggcatcag 1020
ctgaaaagag gacccaaaaa gaaattggag atattgctgg tgttgctgat gttacaatca 1080
gacagtccta tagactgatc tatcctcag ccccgatct gtttcctaca gacttcaaat 1140
ttgacacccc agtgacaaa ctaccacagc tataaattga ggcagctaac gtcaaattct 1200
tgaatacaaa actttgcctg ttgtacatag cctatacaaa atgctgggtt gagcctttca 1260
tgaggaaaaa caaaagacat ggtacgcatt ccagggtgta atactattgc ttggcattct 1320
gtatgtatat actagtgaat catatttaat gatttaatt tcttatcaaa tttcttttgt 1380

```

```

agcaatctag gaaactgtat ttggaagat atttgaatt atgtaattct tgaataaaac 1440
atttttcaaa actcaagttt ttgttatatg ttacatgtaa cttatgatac ataattacaa 1500
ataatgcaaa tcattgcagc taataaagct gatagacttt atttccatta cttatatata 1560
catagttttt tattttaata aattttatgga aagagcaaaa gcttttgaga accattgtta 1620
acatcaacat catagtttcc agtttgaaag gatgtgtatg tgagatttat tatgtatatt 1680
attaaacaag aagtgatgag cttggccttg aaaggcacca gcttgagaga cattaaaatg 1740
ttctaagtaa aaaaa                                     1755

```

<210> 282

<211> 1093

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (90)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (970)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1081)

<223> n equals a,t,g, or c

<400> 282

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cccttcttgg ttgcgcgccc gttcctcgcg ttcttggeyt gccagccccc gaggeccgca 60
gcctccgcgg atccgggccc gctcggcccn tcccatggaa ggtgctcggg tcttcggggc 120
actgggtccc atcgggtccct cctcacctgg gctcaccctc ggggggtctg ccgtgagcga 180
gcaccggctc agcaacaagc tgctggcttg gagcggcgtc ctcgagtggc aggagaagcg 240
cagaccctac tctgactcca ctgcaaagct gaagcggacc ctgccctgcc aagcctacgt 300
gaaccaaggc gagaacctgg agaccgacca gtggccgcag aagctgatca tgcagctgat 360
ccctcagcag ctgctgacca ccctgggccc cctgttccgg aactcccagt tggcacagt 420
ccacttcacc aacagagact gcgactcgct caaggggctc tgccgcacat tgggcaacgg 480
cttcgcgggc tgcattgctgt tccccacat ctcccctgt gaggtgcgcg tgetcatgct 540
cctgtactcg tccaagaaga agatcttcat gggcctcatc ccctacgacc agagcggctt 600
cgtcagtgcc atccggcagg tcatcaccac ccgcaagcag gcagtgggac ctggtggtgt 660
caactcaggc ccagtccaga tcgtcaacaa caagtttctg gcatggagtg gtgtcatgga 720
gtggcaggag cccaggcctg agcccaacag tcggtccaag aggtggctgc catcccacgt 780
ctacgtgaac cagggggaga tcctgaggac cgagcagtg ccaaggaagc tgtacatgca 840
gctcatcccg cagcagctgc tgaccacct agtgccgctg ttccggaact cgcgcctggt 900
ccagttccac ttcaccaagg acctggagac actgaagagc ctgtgccgga tcatggacaa 960
tggcttcgcn ggctgcgtgc acttttcta caaagcatcg tgtgagatcc gcgtgcttat 1020
gctcctgtac tcttcagaga agaaaatytt cattggcytc atcccccatg accagggcaa 1080
ntttgttcaa agg                                     1093

```

<210> 283

<211> 1556

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1324)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1339)

<223> n equals a,t,g, or c

<400> 283

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ggcacgaggg gaatcctcca cgtggctgtc ccagcacgag gaacccatgc acagtgtctgc 60
agaaactgga cagttccgga cagcggwcaa ggcaaggawg tcatgcttga aggccagggt 120
agacttgaga gagttcacat tccactgtca gcaccagcct cagcaactgt gcagagacct 180
acaggcccac agccagtggc ctgtccgcat tggcctgtgc ccacaagcaa cagtccacag 240
cccttggtgg cttctgttcc ttgtcccctc ggcttctctt cgcagccatc aggactaggt 300
ttgtgcagga aggtgatgcc cactggaact ctcctcacac ctggcagctt catggatgtt 360
gtatctgaac taaggaccag aggtgcccag atgtttctgg ctccctcact gtccttcagg 420
acagaacaga agcacaaga ctcagccaag agttctcttt attccctttg atcctccccc 480
aaggtgaggg cttaggcagc tgtagaacct caggaaagaa cggaatccag gcaatctgtt 540
tagagacccc cactccaaa tttatccttt tcctttcctt cccctaagat gtttccaggg 600
ccctctgggtg cccacactgt cctcttcctt ccacttgggg gtggggaaat ccttcctgcg 660
aggtcagggc atttctctac aaagtggcct gaatgaggcc aggccctgag aaggagccac 720
cagctggagg aaaggggctc caagccttgc tttaacacc cctgcaaac cccaccctc 780
ccaagatgtt cacaaaaggt gagaaattca ggtacgaaac catcaatgga caactgaaa 840
atgcatgttc ctcaggccta tgcagttccc agagactctt gacaccggtc tctgctgagg 900
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cacagccctg cctttggttc ctggacattt ggtattctgc cctccactct ggtactatca 1020
gagtagggca ggctctggat taaagctttt agccggtcta aagctacttt cttcaaagac 1080
agtgggagga gaggttgctg gggcatcagc cctgcttccc acagctcctt aggcaagagc 1140
ttaccagca gctgtgagca ccaagctggc cagcagaggc tgggggagga ctttcaggcc 1200
aacacctgcc ccagctgagt ttgggactgt ccttaagcga ggtctggaga gaggcagcgg 1260
cagcagccgg acggggagca ggccaagccg gaaccacagc ctgcagggtg ggggtgttgt 1320
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ggaggggtaca gtcctggctc ccagacaagg ggcggggaga aactgtgtc cttccagagg 1440
ctgtaccaca ctccactgc tgtcaccctt cactgaagcc tcgagcctcg gtagggcctc 1500
cctcttctcc ctgtctatc aagacttaca gcaaggtccc aggttgacag ggagac 1556
```

<210> 284

<211> 1029

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (828)

<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (958)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (972)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (976)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (987)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1007)
<223> n equals a,t,g, or c

<400> 284
tgatggtgtg gtccaatgag cgggtcatgg gttgggtgtc cgggctgggc tgaaggaatt 60
tgccacgaac ctcacggaga gcggggtaca cggggcactg ctcgccctgg acgagacctt 120
cgactactcc gacctggcct tgctcctgca gatccccacg cagaatgcac aggcccggca 180
gcttctggag aaggaattca gcaaccttat ctccttaggc acagacaggc ggctggacga 240
ggacagcgcc aagtctttca gccgctcccc atcctggcgg aagatgttcc gggagaagga 300
cctccgaggc gtaactcccg actcagctga gatgttgccc cccaactttc gttcggctgc 360
agcgggagcc ctgggctctc cggggctccc tctccgcaag ctgcagccag aaggccagac 420
ttctgggagt tcccgggcag acggcggttc ggtccggacc tattcctgct agtgcaggcc 480
tccagggtgac ctactcggc cggagaatc ttcccaggc tgggctgttc cctctcctgc 540
ccggactgtg gcctcgccgg ggagagcggg cgggggagct cgcgcccagg actggaccat 600
ctgtacagac cagcgggagt gcgcgcgccc gcctcgaca gggccggggc tggaccaaac 660
cacatgaact ggactgagag ggggaagaag cggggaggaa gaaatcccgc cccaaacgtc 720
cgctttcctt ttctctactt tgtaatttat tgatcagttt ctggtgggag acgggtgtcc 780
tttaccgcg ggaagggggc ggggcttccc tcccgggccg catgcgnga gargctgctc 840
cctccccctt ttctgcccga gtcgcggggc ccaagtctt ccttcttcgt ccgaaaggag 900
gggaggggga ctctgtctac aagcctcgcc ccctgtgcca ctcagtccga cccgccngt 960
tccggttcgc cnggtncccc cgggttnatc tggcggggcg ggtcccnttg tgccttcccc 1020
ccgtgtttt 1029

<210> 285
<211> 1583
<212> DNA
<213> Homo sapiens

<220>

<221> misc feature
 <222> (1411)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (1531)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (1557)
 <223> n equals a,t,g, or c

<400> 285
 tgtgtctgcg ttgaggggtgt tgaggggtcca cgctgtgaca agtgcacgcg aggggtactcg 60
 ggggtcttcc ctgactgcac accctgccac cagtgcctttg ctctctggga tgtgatcatt 120
 gccgagctga ccaacaggac acacagattc ctggagaaag ccaaggcctt gaagatcagt 180
 ggtgtgatcg ggcttaccg tgagactgtg gactcgggtg agaggaaagt cagcgagata 240
 aaagacatcc tggcgagag ccccgagca gagccactga aaaacattgg gaatctcttt 300
 gaggaagcag agaaactgat taaagatgtt acagaaatga tggctcaagt agaagtga 360
 ttatctgaca caacttccca aagcaacagc acagccaaag aactggattc tctacagaca 420
 gaagccgaaa gcctagacaa cactgtgaaa gaacttgctg aacaactgga atttatcaaa 480
 aactcagata ttcggggtgc cttggatagc attaccaagt atttcagat gtctcttgag 540
 gcagaggaga ggggtgaatgc ctccaccaca gaaccaaca gcactgtgga gcagtcagcc 600
 ctcatgagag acagagtaga agacgtgatg atggagcgag aatcccagtt caaggaaaaa 660
 caagaggagc aggtcgcct ccttgatgaa ctggcaggca agctacaaag cctagacctt 720
 tcagccgstg ccgaaatgac ctgtggaaca ccccgaggg cytctgtty cgagaytgaa 780
 tgtgcccggc caaactgcag aactgacgaa ggagagagga agtggtgggg gcctggctgt 840
 ggtggtcttg ttactgttgc acacaacgcc tggcagaaag ccatggactt ggaccaagat 900
 gtctctgagt ccctggctga agtggacag ctctccaaga tggctcttga agcaaaactg 960
 agggcagatg aggcaaaaca aagtgtctga gacattctgt tgaagacaaa tgctacaaa 1020
 gaaaaaatg acaagagcaa tgaggagctg agaaatctaa tcaagcaaat cagaaacttt 1080
 ttgaccagg atagtgtctga tttggacagc attgaagcag ttgctaataga agtattgaaa 1140
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 actgcagata tggtaaagga agctctggaa gaagcagaaa agggccaggc cgcagcagag 1380
 aaggcaatta aacaagcaga tgaagacatt ncaaggaacc cagaacctgy taacttccsa 1440
 ttggagttct kgaacacgca gctttctgga ggaaaccttg ttcaacgcgt tcccagggca 1500
 tccagcgagt ttagagagga tgtgggaaga nctttaagcg gaaagctggc ccaaaanccc 1560
 gggggaggcc gaattttttg gaa 1583

<210> 286
 <211> 1177
 <212> DNA
 <213> Homo sapiens

<400> 286
 gctcaaaatg tttaccaatg ttttaagatg tctttatcaa gcaaccgtat cagcagagaa 60
 aagayatctc aaaatgttta ccaatgtttt aagaagcttt gtgtgatatt cttccaaatg 120

```

tagttaccaa atataatatg gtagaaaagg ctaaatcata cttaatgagc aaattgaagt 180
aagcttttaa agtatatttc tcttttggtg aaaggccaat ggagacattg tgaatttaag 240
tgaacatttg cctcaagatg ttaactataa acacactgca tacaattttc ttctgaataa 300
caaatgaatg cttattgctg catgatgtaa gcaaaagtca ttatttttcc tattcatttg 360
aaataagtta tggcttaaaa tgcttttgga gtttatttct caaaattaaa atctgggtcac 420
atgagcttta gtttgttttc tggtttaaaa aataaaaagg tttctcttaa cagtatttcc 480
agtgacaatg caaggtaagt atatcaaagg aaatcaacag ttgtgcttgg gggctttttg 540
ttatgggata ttgatttctt gtttttttcc cgtaacattg tctgctgcaa tttaaataaa 600
aattacgaca ttttaagata tttcatagac aaaccaaaca aaaatatatg tttttacttt 660
aaagtgaatg tttttctctt cagctgatct aaaaatgaaa gcaaratatc ttatgtagaa 720
atattttgat aatattttta cagtgaactt tcccatgttt ttatgtctta agtttctttg 780
ctgcgtttat gtaggttgca caagaacttt tactcacttg taattgtgcc tcagactttt 840
tgaaagtcta ccttctaaat tgccccgacg atctagattc tacatgttac cattggttta 900
ttcttggtct ttctgtattt aaaactttgg ctgtactaag caaatgcaag gttataattt 960
agctaatagt agtttacaga caattctgat gattatgatt tcatttggtt taactaagct 1020
gtactagttc atttcataag gaaatgatac tgtagacaaa tgtaaataaa gcctgtgagt 1080
caagcatcaa gtggtgtttg ttagaaataa actagagatt tttaaaaaaa aaaaaaaaaa 1140
aaaaaaaaaa aaaaaaaaaa acccccgggg gggggccc 1177

```

<210> 287

<211> 506

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (394)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (470)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (481)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (494)

<223> n equals a,t,g, or c

<400> 287

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acaagtagct gcagtagcgt acggaattac agggtagacc caagcgtacg taaaatttaa 60
aaacaaagga ctatttaaaa atacagttta ttaacaaacg tgaactactt tctgttacat 120
taggtgttcc ctagtgtttc ttaatttctt ttagaaagt gtatttttat tagtattttt 180
ccggtgaaca gaagatttgt ttggatttaa acatttacta agacagtacc tattaggaaa 240
accaaatatt gcaaatggtc aattcgattt taatttctca aaagatactc tgttatccag 300
aagattaaaa tgcctacatt gagtgcctta aaaaaaaaaa acmactgtga tratktgagc 360

```

```

agaatggcca gtaagttaaag ccttttttga tccnggtaat ccagggtatc catttaccat 420
ggaaaggggg ttccccaac tactggccca gaggggaagt tggttttttn aaatttaagg 480
nggggaaatt ttanccctat aaaatt 506

```

```

<210> 288
<211> 948
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc feature
<222> (3)
<223> n equals a,t,g, or c

```

```

<220>
<221> misc feature
<222> (926)
<223> n equals a,t,g, or c

```

```

<400> 288
ttnggccgag cttgggtcat ggcggcgccg ggcgcgctgc tggatgatgg cgtgagcggc 60
tcggggaaat ccaccgtggg cgccctgctg gcatctgagc tgggatggaa attctatgat 120
gctgatgatt atcaccgga ggaatcga aggaagatgg gaaaaggcat accgctcaat 180
gaccaggacc ggattccatg gctctgtaac ttgcatgaca tttactaag agatgtagcc 240
tcgggacagc gtgtggttct agcctgttca gccctgaaga aaacgtacag agacatatta 300
acacaaggaa aagatggtgt agctctgaag tgtgaggagt cgggaaagga agcaaagcag 360
gctgagatgc agtcctggt ggtccatctg agcgggtcgt ttgaggtcat ctctggacgc 420
ttactcaaaa gagaggga ttttatgccc cctgaattat tgcagtccca gtttgagact 480
ctggagcccc cagcagctcc agaaaacttt atccaaataa gtgtggacaa aaatgtttca 540
gagataattg ctacaattat ggaaacccta aaaatgaaat gacaatgatt ttgtatcagt 600
ggtccaaaca gaactaagca taaatcattg tgccatccca aacctcggtc cagccgcctt 660
gcccatacta gattctaaat gtttctaaag gcaaacccca atgtgtcaag acagacttgt 720
ttaggtgtaa ttttaggaat tatgtggtt catcaggaag cagaggggga gttttaaaag 780
tcaagcttaa attgaagttt aaattcatct ataacaaat caaatgatca gaggaaattc 840
tgtaatcaat gctggaaatc gttacattgt ttagaacatt cttgctcatg cctgtatttg 900
cacaataaaa tgaaacttcg ctgtcnaaaa aaaaaaaaaa aaaaaaaaaa 948

```

```

<210> 289
<211> 1034
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc feature
<222> (376)
<223> n equals a,t,g, or c

```

```

<400> 289
ggcacgagct cgtgccggtt tgacctggag catgggtcct ggaccaaatt gccccgcagc 60
ctgcgcatga gggataagag ggcagacttt gtggttgggt cccttggggg ccacattgtg 120
gccattgggg gccttggaac ccagccatgt ctttgggct ctgtggagag ctttagcctt 180

```

```

gcacggcggc gctgggaggc attgcctgcc atgcccactg cccgctgctc ctgctctagt 240
ctgcaggctg ggccccggct gtttgttatt gggggtgtgg cccagggccc cagtcaagcc 300
gtggaggcac tgtgtctgcg tgatggggtc tgaaggcttg gtgggagctg tccactggag 360
cagctcattg ccagangmrg ctatttctat ggctcctttt gctgctgagg acactcactg 420
tggctctgtg ggatgagaga ggcattgggg tgagcacttg aaacactgcc ttggggcctt 480
gggttagggg agcctttgtc tttagtgcag gacacacata tgcttacacc tacctttatc 540
accattcgtt catgaatcat gcctagctcc atccttgccc tgggacctac taggccttcc 600
atccaactgg gaaatgggga gaagcaaagc tggcctcatg ctcttcaggg tcagttccta 660
tctggagtgg accaggccta cccagttgac cattcctgaa aaatctcagc tgccaggctg 720
cctttagggt ccctgtagac ccaggagagt tgagagggtg ggggacacag agagaataga 780
gaggatgtgg gaactgccag agggccggag cgcaggagtt caagtggagg aatgctggct 840
ttgagccctc tacactgctg gttgtatgac cttggacaag tcacttcacc tctctgtgcc 900
tcagcatcct catctataaa tggggatctc tgaaaccttc ctaccctacc tacctcacag 960
ggctgtttgt aggaccagg gagtttggat gtggaagtaa aagtgtgctg aaaaccta 1020
aaaaaaaaa aaaa

```

1034

<210> 290

<211> 3091

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (24)

<223> n equals a,t,g, or c

<400> 290

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catttggttt cctattacct gtagtaata tattagttag tacatggaat ttatagcatc 240
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tggatttgat ggacctaaag aaataaaaat tagactaagc ccccaaataa gctgcatgca 480
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tgccctgggt gtgcctcctc ttgtctgccc tcatgaagaa gcttccctca cgtgatgtag 780
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tgtgagagtt tttctgtaga agcagaactg tcagcttggt ccttgaggct tccagaacgt 900
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```

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<210> 291

<211> 518

<212> DNA

<213> Homo sapiens

<400> 291

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tgccggtggc cgtgcagtgt gtggctctgc cctggcaaga agagttgtgt ctgcggttca 180
tgccggagggt ggagcgactg atgaccctcg aaaagcagtc atcctgatgg ctctggctcc 240
agaggacctg agactcacac tctctgcagc ccagcctagt cagggcacag ctgccctgct 300
gccacagcaa ggaaatgtcc tgcattgggc agaggcttcc gtgtcctctc cccaacccc 360
ctgcaagaag cgccgactcc ctgagtctgg acctccatcc ctgctctggt cccctctctt 420
cgtcctgac cctccacccc catgtggcag cccatgggta tgacatagcc aaggcccaac 480
taacagtcaa gaaacaaaaa aaaaaaaaaa aaaaattc 518

```

<210> 292

<211> 498

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature
 <222> (447)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (468)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (475)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (479)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (482)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (489)
 <223> n equals a,t,g, or c

<400> 292
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 ccaggaagcc gtgtcagcgg ccggagcggc agctcagcaa gtggtggacc aggccacaga 180
 ggcggggcag aaagccatgg accagctggc caagaccacc caggaaacca tcgacaagac 240
 tgctaaccag gcctctgaca ccttctctgg gatcgggaaa aaattcggcc tcttgaaatg 300
 acagcaggga gacttgggtc ggccctctga aatgayagca gggagacttg ggtgaccccc 360
 cttccaggcg ccatctagca cagcctggcc ctgatctccg ggcagccacc acctcctcgg 420
 tctgccccct cattaaaatt cacgttncca aaaaaaaaaa raaagggngg ccgcntagn 480
 gntccaagnt tagttacg 498

<210> 293
 <211> 469
 <212> DNA
 <213> Homo sapiens

<400> 293
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 gatccaacgt cgctccagct gctcttgacg actccacaga taccgccgaag ccatggcaag 120
 caagggcttg caggacctga agcaacaggt ggaggggacc gccaggaag ccgccatgga 180
 ccagctggcc aagaccacc aggaaaccat cgacaagact gctaaccagg cctctgacac 240
 cttctctggg atygggaaaa aattcggcct cctgaaatga cagcaggag acttgggtcg 300

227

gcctcctgaa atgayagcag ggagacttgg gtgaccccc ttccaggcgc catctagcac 360
agcctggccc tgatctccgg gcagccacca cctcctcggg ctgccccctc attaaaattc 420
acgttcccaa aaaaaaaaaa aaaaaaaaaa gggggggccc gtccccatt 469

<210> 294

<211> 668

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (568)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (650)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (652)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (658)

<223> n equals a,t,g, or c

<400> 294

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tggcggcgcg gggctgaagg ctagcaaacc gagegatcat gtcgcacaaa caaatttact 120
attcggacaa atacgacgac gaggagtgtg agtatcgaca tgtcatgctg cccaaggaca 180
tagccaagct ggtccctaaa acccatctga tgtctgaatc tgaatggagg aatcttggcg 240
ttcagcagag tcagggatgg gtccattata tgatccatga accagaacct cacatcttgc 300
tgttccggcg ccactaccc aagaaaccaa agaaatgaag ctggcaagct acttttcagc 360
ctcaagcttt acacagctgt cttacttcc taacatcttt ctgataacat tattatgttg 420
ccttcttggt tctcactttg atatttaaaa gatgttcaat aactgtttg aatgtgctgg 480
taactgcttt gcttcttgag tagagccacc accaccatag ccagccaga tgagtgtctt 540
gtggaccaca gcctaagctg agtgtgancc cagaagccac gatgtgctct gtatccagac 600
acacttggca gatggaggaa gcatctgatt gagacatggg gtacaggtcn gnaatgcngt 660
ttgttttc 668

<210> 295

<211> 1400

<212> DNA

<213> Homo sapiens

<400> 295

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gcggcccgtg gcgaggcgag gtccggggag cgagcgagca agcaaggcgg gaggggtggc 120

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ggggtgtacg aagcggccaa gctgctcaac gtcgaccccg ataacgtggt gttgtgcctg 480
ytggcgccg acgaggacga cgacagagat gtggctctgc agatccactt caccctgac 540
caggcgtttt gctgcgagaa cgacatcaac atcctgcgcg tcacaaccgc ggccggctgg 600
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cccgagcctg cactgcgtgt ggtgacgaat ccacattcat ctcaatggaa ggatcctgcc 720
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tataaattct actaagttat tttatgacat gaaaagttat ttatgtata aattttttga 1320
aacacaatac ctacaataaa ctggtatgaa taattgcatc aaaaaaaaaa aagggggggc 1380
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<210> 296

<211> 960

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (599)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (859)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (933)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (950)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (951)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (959)

<223> n equals a,t,g, or c

<400> 296

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gggcccggcg cgggtgtgga gcggcgcgtc atgtacacca tcaccaaggg gccagcaag 180
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gcgcascgccc gggaccctgg cccctgtcga gtccaggggc aaggcttggt ttcaatcgtg 360
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cagtggccca cgaggagaat gtccgctttg tgtccgaagc ctggcagcag gtgcaacagc 480
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cccccaatcc ccggctgcag aactttgtgc ccattgacct agacgagtgg tgggcgcanc 600
agtccctggc gagaatcacc agctgttcct agtggctgct gggagggggc gctgctacac 660
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tgtgcccagg gaccagcgna caccctggg gctggcaggg aggagctcca ggctaataaa 900
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```

<210> 297

<211> 657

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (29)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (86)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (88)

<223> n equals a,t,g, or c

<400> 297

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caggaattcg gcacgagctc gtgccngncc tttggagcag agaggaggca atggccacca 120
tggaagaaca ggtgatctgc gccctggtcc tgggtgtccat gctggccctc ggcacctgg 180
ccgaggccca gacagagacg tgtacagtgg ccccccgtga aagacagaat tgtggttttc 240
ctggtgtcac gccctcccag tgtgcaaata agggctgctg ttctgacgac accgttcgtg 300
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gggtcccctg gtgcttctat cctaatacca tcgacgtccc tccagaagag gagtgtgaat 360
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attagtccca gagctcggtt gccacctcca ccggacacct cagacacgct tctgcagctg 480
tgctctggct cacaacacag attgactgct ctgactttga ctactcaaaa ttggcctaaa 540
aattaaaaga gatcgatatt aaaaaaaaaa gaaaaggaaa aaaaaggcg gccgtctaag 600
aggatccaag cttacgtaac gcgtgcatgc gaaggcata gctcttctat agtgtca 657

```

<210> 298

<211> 892

<212> DNA

<213> Homo sapiens

<400> 298

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cctctgcctg cccctgtgga ctgatgctat cgcgcaccgt cccacgacct caccctgagc 180
tcctgaagcc ggggtctgag cctgcatcac ctctggcctc tcatcccca ctctcctgag 240
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tcccaagaac aagatgtgat ggcattctgt gctgaaacct tgatgaggac caggccccct 780
gcaccgctgt cagcctgagg aattaaagct ttggtgctgg gaaragcaaa aaaaaaaaaa 840
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa tc 892

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<210> 299

<211> 1624

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1621)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1623)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1624)

<223> n equals a,t,g, or c

<400> 299

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ccccggctgc aggaattcgg cacgagagag gaggtccac aggtcctgc cctgggctac 60

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cgagtcccc gatggtgta tacattaaat atccaggatg gagaagccac atgctactca 120
ccgaaggagg aaattatcac agcagcctgg gcacgcgttg tgagctctcc tgtgaccggg 180
gctttcgatt gattggaagg aggtcgtgac aatgcctgcc aagccgtcgt tggctctggaa 240
ctgcctactg caggcagatg agatgccacg cactaccatt catcactagt ggcacttaca 300
cctgcacaaa tggagtgett cttgactctc gctgtgacta cagctgttcc agtggctacc 360
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cagagccaga gaaattgact gctcgagtat actgggaccc accgttggtg aaagattctg 540
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aaggagagca tgtgattcgt tacactgcct atgaccgagc ctacaaccgg gccagctgca 660
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acaggccttg ggcagtgggt tgggggtaga agttcttcct ttcctaaccg gggcccctgc 1560
ccagctctcc aaagtcttcc agaaaagtaa atcctaaatt cagtgatgaa aaaaaaaaaa 1620
nann 1624

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<210> 300

<211> 1969

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (13)

<223> n equals a,t,g, or c

<400> 300

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ggatccggag ccgcccgaag ccggtgccgc agccccctgc gccccgggtg ccccccacat 120
gtccttcgcg aaagtgggtc ggcagagcaa atcccgcat gtgttcgggc agccggtcaa 180
gaacgaccag tgctatgagg acattcgctg gtcccgtgtt acctgggaca gcaccttctg 240
cgccgtcaac cccaagttcc tggcggtgat tgtggaggcc agtggagggg gtgcctttct 300
ggtgctcccc ctaagcaaga cgggcccgcg tgacaaggcc taccgacagg tgtgtgggca 360
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tcggaggact gcacggtcag ggtgtggcag atcccagaga acgggctgac ctccccgctg 480
acagagccgg tgggtgtact ggaggggcac accaagcgag tgggcatcat cgctggcac 540
cccacgcccc gaaacgtgct gctcagtgca ggctgcgaca acgtggtact catctggaat 600
gtgggcacag cggaggagct gtaccgcctg gacagcctgc accctgacct catctacaat 660
gtcagctgga accacaatgg cagcctgttt tgctcagcat gcaaggacaa gagcgtgcgc 720

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atcatcgacc cccgtcgggg caccctggtg gcagagcggg agaaggctca tgagggggcc 780
cgcccatgc gggccatctt cctggcagat ggcaagggtg tcaccacagg cttcagccga 840
atgagcgagc ggcagctggc gctctgggac ccagaaaacc tcgaggaacc catggccctg 900
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<210> 301

<211> 1882

<212> DNA

<213> Homo sapiens

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<220>

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<222> (1849)

<223> n equals a,t,g, or c

<400> 301

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<210> 302

<211> 2804

<212> DNA

<213> Homo sapiens

<400> 302

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<211> 3859

<212> DNA

<213> Homo sapiens

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<220>

<221> misc feature

<222> (889)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (890)

<223> n equals a,t,g, or c

<400> 303

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<210> 304

<211> 3378

<212> DNA

<213> Homo sapiens

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<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1350)

<223> n equals a,t,g, or c

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<222> (3361)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3365)

<223> n equals a,t,g, or c

<400> 304

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<210> 305
<211> 1014
<212> DNA
<213> Homo sapiens

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<212> DNA
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<210> 307

<211> 666

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

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<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (664)

<223> n equals a,t,g, or c

<400> 307

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<210> 308

<211> 2171

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature
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<223> n equals a,t,g, or c

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<221> misc feature
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<221> misc feature
<222> (2166)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2168)
<223> n equals a,t,g, or c

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<210> 309

<211> 6163

<212> DNA

<213> Homo sapiens

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<221> misc feature

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<220>

<221> misc feature

<222> (6135)

<223> n equals a,t,g, or c

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<221> misc feature

<222> (6158)

<223> n equals a,t,g, or c

<400> 309

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<211> 2086

<212> DNA

<213> Homo sapiens

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<210> 311

<211> 2163

<212> DNA

<213> Homo sapiens

<400> 311

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aaa 2163

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<210> 312

<211> 1397

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1397)

<223> n equals a,t,g, or c

<400> 312

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ggtcctctca ggaaaggggg gcgttgggaa aagcaccatc tccacggagc tggccctggc 180
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tcggttcccg ggccctgcag gggcaggccc aggcagcgtc agcgggagag cttctccccg 1020
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tggctctgctg gctctgcagc tgtgagacgg gggcggcctg ggctctcttc ccatccatgt 1140
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aaaaaaaaa aaaaaan                                     1397

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<210> 313

<211> 4106

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (344)

<223> n equals a,t,g, or c

<400> 313

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ttctccatc tatcctgtat cctccaccgt acagccagta gcagctgcgg ctactgtggt 180
gccatcctat actcagagtg ctacttacag taccacagca gttacatatt ctggtacgtc 240
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gcagcaacag aagcaggcag cagcagcagc tgtgtgctgt cganactagc tgccctggaca 360
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cccaaaccac cacagattca ctattgtgat gtttgtraga tcagctgtgt ggaccacaga 480
cttataaaga acatttagaa ggacagaaac ataaaaaaa agaagctgca ttgaaagcct 540
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<210> 314

<211> 532

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (497)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (498)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (502)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (524)

<223> n equals a,t,g, or c

<400> 314

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ccatgcccga gtgtcccaag tgcaacaagg aggtgtactt cgccgagagg gtgacctctc 180
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ggtggtggag accccatcct tggctgcttg cagggccact gtccaggcaa atgccaggcc 420
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<210> 315

<211> 1938

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1270)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1455)

<223> n equals a,t,g, or c

<400> 315

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gcggctgcgg gcagccgagg cggccgaggc ggccggcgcg gcggcgggcg ccggcagcgg 180
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1938

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<210> 316

<211> 818

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (55)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (814)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (818)

<223> n equals a,t,g, or c

<400> 316

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<210> 317

<211> 837

<212> DNA

<213> Homo sapiens

<400> 317

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<210> 318

<211> 1448

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (878)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1198)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1395)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1397)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1445)

<223> n equals a,t,g, or c

<400> 318

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ctgcaggcag gttgttgggt ttcgaggcca acggggccaa cgggtctaaa gcaggtaggg 180
gcggctgtga agtgaggggg tctaggggag aaaaggggac ggagagcaga ggaaggggtg 240
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aaacntgg
1448

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<210> 319

<211> 1493

<212> DNA

<213> Homo sapiens

<400> 319

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aaaatactcc aaccttttct tggaaagtca taacatctca ctgactgaac attccagtg 180
gccagtggaa aaaaatatca ctttagaacg accttctgct gtagaactca catgtcagtt 240
cacaacttct ggggatgtga attcagtaaa tgtgacttgg aaaaaagggg atgaacaact 300
taagaattac catgtcagtg ccacagaagg catcctgtat acccagtaca agttttccat 360
cattaatagc gaacaactgg gaagctattc ttgtttcttt gaagaggaaa aggaacgaag 420
gggcacattt aatttcggag tccctgaagt tcagagaaaa aacaaacat tgatcactta 480
tgtgggggat tccgttgtct tgggtgtgaa atgccgacac tgtgctcctt taaattggac 540
ctggtacagt ggtaatagga gtgtacaggt tcctcttgat gttcacatga atgaaaagta 600

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tgcgatcaat ggaacaaacg cgaatgaaac aaggcttaag ataatgcagc tttcagaaga 660
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tgaactgggt gtgataagtt atttgggtgcc cctcaaacca tttcttgga tagttgttga 780
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atatttgtaa taattttcat gtaatgkta ccctctgtca tattggataa aaacatcttt 1440
attaagaaat gaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaagggcggc cgc 1493

```

<210> 320

<211> 609

<212> DNA

<213> Homo sapiens

<400> 320

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ggcacgagtg gcttctgacc ctttcttccg ccaactaccgc cagctcaatg agaagctagt 60
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gagcatccag cgagtcctgc aggtgttgga taaagccaat ggatactgtt tcggagccca 180
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tggtgccaag cagaacaccc ccatactgt cagtgggtgc cgtgagctct ggccttgcca 540
ccagaaagtc gagcactggt cctagtcagg ctgtgatgaa atgtgctaca atacaagagt 600
ttattttct
609

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<210> 321

<211> 502

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (458)

<223> n equals a,t,g, or c

<400> 321

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gcctcaggaa gcccgaggtc ggcggtgtra tccgggcat cgtgcgggca ggcctggcca 180
tgccccggcc cccactaggc ccagtgtctg gtcagagagg cgtttccatc aaccagtgtt 240
gcaaggagtt caatgagagg acaaaggaca tcaaggaagg cattcctctg cctaccaaga 300
ttttagttaa gcctgacagg acatttgaaa ttaagattgg acagcccact gtttcctact 360

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tcctgaaggc agcagctggg attgaaaagg gggcccggca aacagggaaa gaggtggcag 420
gcctggtgac cttgaagcat gtgtatgaga ttgccgnat caaagctcag gatgaggcat 480
ttgcctgcag gatgtacccc tg 502

<210> 322

<211> 2630

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1952)

<223> n equals a,t,g, or c

<400> 322

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acccttccgg cacctctgga cagcccagga tgctgttgcc caccctctc ctccctctcc 180
ttggaggcgc tctggcccat ccagaccgga ttatttttcc aaatcatgct tgtgaggacc 240
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tccagccact gatctccctg tgtgaggcac ctcccagccc tctgcagctg ccggggggca 480
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<210> 323

<211> 1874

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (67)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1735)

<223> n equals a,t,g, or c

<400> 323

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agtggaaatcg gtccgcggct cgagtgggtc tctagtccgg cgccagccgc ccggcccagc 180
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ctcctgagac acatgggtgc tatggggggg agctgaggta ccgaccttgg atgtgccatg 1560

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gggtgggggt gggaaaacag agcaggcttc ctggatgtct gagcagatct tcccaggcag 1620
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tgccttcaat cagtgttcat atttatagcc aagtgccttc tcatctgtga gacagaatcg 1800
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cacctcagcc ctaa 1874

<210> 324

<211> 2325

<212> DNA

<213> Homo sapiens

<400> 324

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ttgacgttaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaa

2325

<210> 325

<211> 785

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (6)

<223> n equals a,t,g, or c

<400> 325

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cccaggagtt ccggaagcca aagccccccc acgaggggtcc cgcgaagacc tggtagcgga 120
ggagagcccc gagctgctga accctgagcc caggagactg agcccagagt tgaggctact 180
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gccctggctc ctcttcctgc tgcacaacgt gggcctgctg ggcggctgga ccgtcctgct 600
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ttgacttaag atccacaccc tcacaaacct acagcccaga aaccagaagc ccctatagag 720
gccccagtc caactccagt aaagacactc ttgtccttg aaaaaaaaaa aaaaaaaaaa 780
aaaaa 785

<210> 326

<211> 244

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (244)

<223> n equals a,t,g, or c

<400> 326

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gcgtccgacg acagaagggt acggctgcga gaagacgaca gaagggtagc gctgcgagaa 120
gacgacagaa gggtacggct gcgagaagac kacagaaggg tacggctgcg agaagackac 180
agaagggtac ggctgcgaga agacgacaga aggtacggct gcgagaagac gacagagggg 240
acgn 244

<210> 327

<211> 2454

<212> DNA

<213> Homo sapiens

<400> 327


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tgcattnggc tgggattcaa accatgttac tcctgacca ngtnngncct ntttcaaann 420
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gtaataggct gatataattac acttggtgat gtaanctgga tangtttctt tcttctccaa 360
ggacagcttt tttaatattt aacantncca ttaatttttc agtttccggg agaattttat 420
aattttaaata tgccgactta ngganaancc aattggcncca accattacaa tanattttta 480
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ccatatcgat gggcancaat tgncaattat tgtgnagcaa tacacacggg gtttccangg 300
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<220>
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<400> 335
ctccgcaaatt tgaacctcnc actcaaaggg aaacaaaagc tggagctcca ccgcggtgac 60
ggccgctcta gaactagtgg ggggcccggt acccaattcg ccctatagtg agtcgtatta 120
caattcactg gccgtcgttt tacaacgctg tgacnnggaa aacntnnaat ncttccggct 180
cgtatgttgt gtggaattgt nagecgataa caattcacac aggnancagc tataaccatg 240
attnnnccaa gntcgaaatt aacctnact aaaggggaca aaagtngggg ctccacg 297

<210> 336
<211> 386
<212> DNA
<213> Homo sapiens

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<220>
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<220>
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<220>

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<222> (185)

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<220>

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<222> (204)

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<220>

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<222> (244)

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<220>

<221> misc feature

<222> (251)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (261)

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<220>

<221> misc feature

<222> (265)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (272)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (275)

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<220>
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<222> (286)
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<222> (315)
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<220>
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<222> (322)
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<220>
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<222> (328)
<223> n equals a,t,g, or c

<220>
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<222> (337)
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<220>
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<222> (344)
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<222> (346)
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<222> (363)
<223> n equals a,t,g, or c

<220>
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<222> (365)
<223> n equals a,t,g, or c

<220>
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<222> (380)
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<400> 336
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caaaatgctg ctgggtgttt atgcctactt tatagagcat aagcagcgca acacccttat 120
ctggttgncg acggatggtg atgcccngga actttatgaa aaaccacgt tgagcccgac 180
tattngngat attccgtcgn tgcntggggc tggccccgtg gtatggcaaa aaagcaccgg 240
gttnaacaag ntcaaccatg naagngtttc anctnaatgg gggggncccc gtaacccaat 300
tngncctata agtnnatggg antttaanaa ttcaatnggc cctngntttt aaatggtgng 360
tgntnggcct ttttttttn gtttgt 386

<210> 337
<211> 506
<212> DNA
<213> Homo sapiens

<220>
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<223> n equals a,t,g, or c

<220>
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<222> (360)
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<220>
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<222> (404)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (412)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (414)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (437)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (439)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (469)
<223> n equals a,t,g, or c

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<221> misc feature
<222> (470)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (471)
<223> n equals a,t,g, or c

<220>
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<222> (472)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (481)

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<220>

<221> misc feature

<222> (483)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (501)

<223> n equals a,t,g, or c

<400> 337

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caccactatg taccctggca ttgccgaccg aatgcagaag gagatcacgg ccctagcacc 120
cagcaccatg aagatcaaga tcattgcccc tccggaggcg caaatactct gtctggatcg 180
gtggtccat cctggcctct ctgtccacct tccagcagat gtggatcagc aaacagggaa 240
tacggtgaag ccgggccttc cattgtccac cgcaaatgct ttcttaaaac acttttcctg 300
gttcctnttc tgtcttttag gcacacaact gtggaatgtn cctgtgggaa tttatggccn 360
tttcagtttc tttttccaaa tcattcctag ggccaaagtt ttgnattggt tnanccatgg 420
ggttttttta aataaantnt ggaaataggg ttaattggtt aaaaaaaann nnaaaaaaaa 480
ntntgggggg ggggggcccg ntaccc 506
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<210> 338

<211> 623

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (441)

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<220>

<221> misc feature

<222> (508)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (509)

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<220>

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<222> (513)

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<220>

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<222> (537)

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<222> (565)

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<222> (599)

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<220>

<221> misc feature

<222> (612)

<223> n equals a,t,g, or c

<400> 338

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aagaaggagc tgtctgacat cgctcaccgc atcgtggcac ctggcaaggc catcctggct 120
gcagatgagt ccactgggag cattgccaag cggtgcagc ccattggcac cgagaacacc 180
gaggagaacc ggcgcttcta ccgccagctg ctgctgacag ctgacgaccg cgtgaacccc 240
tgcattgggg gtgtcatcct cttccatgag acactctacc agaaggcgga tgatgggcgt 300
cccttcccc aagttatcaa atccaagggc ggtgttgttg gcatcaaggt agacaagggc 360
gtgggtcccc tggcaggagc aaatggcgag actaccaccc aagggttgga tgggctgtct 420
gagcgctgtg ccagtagcaa ngaaggacgg agctgacttc ggccaagtgg cgttgtgtgc 480
ttaagaatgg gggaacacac cccctcannc ctnggcacaa tggaaaatgc caattgntct 540
ggccccgtat gccagtatct ggcanagaa tgcattgggc cattcgggga gtctgananc 600
tcctgatggg ancatgactt gaa                                     623
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<210> 339

<211> 344

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (88)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (157)

<223> n equals a,t,g, or c

<220>

<221> misc feature
 <222> (171)
 <223> n equals a,t,g, or c

<220>
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 <222> (210)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (298)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (317)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (330)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (343)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (344)
 <223> n equals a,t,g, or c

<400> 339
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 ttttttatat ttcaactaaa agtatcanaa tatagctttc cagaaaaccc cgaaccaaag 120
 tcaactgacta catcaaagtc tactacacct tggaganaac aaatgaacga naatctattt 180
 tcctcattca ttaccccaac aataataggn ctccctatcg taattattat cactatgttt 240
 ccaagcatta tattcccatc acctaccga ctaatcaata atcgactcat ctccattnca 300
 acaatggatt agtgcantga acatgcaaan gcaaggatta tcnn 344

<210> 340
 <211> 345
 <212> DNA
 <213> Homo sapiens

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 <222> (6)
 <223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (13)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (31)
<223> n equals a,t,g, or c

<220>
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<222> (88)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (90)
<223> n equals a,t,g, or c

<220>
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<222> (128)
<223> n equals a,t,g, or c

<220>
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<222> (135)
<223> n equals a,t,g, or c

<220>
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<220>
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<222> (146)
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<220>
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<220>
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<222> (172)
<223> n equals a,t,g, or c

<220>
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<222> (173)
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<220>
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<222> (296)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (313)
<223> n equals a,t,g, or c

<220>
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<222> (339)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (343)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (345)
<223> n equals a,t,g, or c

<400> 340
agacangctc tantacgact cactataggg naaagctggt acgcctgcag gtaccgggtcc 60
ggaattcccg ggtcgaccca cgcgtccngn aggaggggac agctgcgggc gcggggaggg 120
ggcgccgngc cgcgngngc catggnggac agnagagccg ggagtccgag annccgggcc 180
gcagcccagag atgtcgccgc catggtctcg ccgcagctct gccgcgcgct ggtgtcggcg 240
caatgggtgg cggaagcgct gcgggccccg cgcgctgggg cagcctctgc agctgntagg 300
acgcctcctg gtnacctggc cggaagctgg ggggcgcgna cgncn 345

<210> 341
<211> 170
<212> DNA
<213> Homo sapiens

<220>
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<222> (20)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (23)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (43)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (86)

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<220>

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<222> (160)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (163)

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<220>

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<222> (164)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (170)

<223> n equals a,t,g, or c

<400> 341

accacgcgt ccgccacgn tcncgactag ttctagatcg cgnacggccg ctctagagga 60
tccaagctta cttggacatg catgcnacgt catagctctt ctatagtgtc acctaaattc 120
aattcactgg ccgtcgtttt acaacgtcgt gactgggaan atnntaaan 170

<210> 342

<211> 387

<212> DNA

<213> Homo sapiens

<220>

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<222> (238)

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<220>

<221> misc feature

<222> (273)

<223> n equals a,t,g, or c

<220>
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<222> (328)
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<220>
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<222> (337)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (351)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (366)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (384)
<223> n equals a,t,g, or c

<400> 342
aatgacttgg ttgagtactc accagtcaca gaaaagcatc ttacggatgg catgacagta 60
agagaattat gcagtgtctc cataaccatg agtgataaca ctgcggccaa cttacttctg 120
acaacgatcg gaggaccgaa ggagctaacc gcttttttgc acaacatggg ggatcatgta 180
actcgcccttg atcgttggga accggagctg aatgaagcca taccaaacga cgagcgtnac 240
accacgatgc ctgtagcaat ggcaacaacg ttngcaaact attaactggc ggactactta 300
ctctagcttc ccggcaacaa tttatagnct tgggtgnggc gggtaaagtt ncaaggccca 360
tttttnggtt tggccttcg gttngtt 387

<210> 343
<211> 186
<212> DNA
<213> Homo sapiens

<220>
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<222> (26)
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<220>
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<222> (64)
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<220>

<221> misc feature
<222> (71)
<223> n equals a,t,g, or c

<220>
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<222> (109)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (152)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (153)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (160)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (183)
<223> n equals a,t,g, or c

<400> 343
gctgcaggaa attaacagag tctacnagga aatgtacaag actgatctgg agaaagacat 60
tatntcggac ncatctggtg acttccgcaa gctgatggtt gccctggcna aagggttaaaa 120
aacagaagaa tgggtccgtcc ttgaatatga anngaatan ccacatgccg ggatttcctt 180
ganccc 186

<210> 344
<211> 611
<212> DNA
<213> Homo sapiens

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<222> (8)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (11)
<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (285)

<223> n equals a,t,g, or c

<400> 344

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tgcaaggnga nactaccctc actaaagga aaaaaagctg gagctccacc gcggtgcggc 60
cgctctagaa ctagtgatc ccccgggctg caggaattcg gcacgagctg cggtgggctc 120
cgggaagccg ttcgggctgg ggctgtcggc cgcggggcgg aggcactcgc gcgggggatg 180
gcccactgcg tgaccttggg tcagctgtcc atttcctgtg accatctcat tgacaaggac 240
atcggtcca agtctgaccc actctgcgtc cttttacagg atgtnggagg gggcagctgg 300
gctgagcttg gccggactga acgggtgcgg aactgctcaa gccctgagtt ctccaagact 360
ctacagcttg agtaccgctt tgagacagtc cagaagctac gctttggaat ctatgacata 420
gacaacaaga cgccagagct gagggatgat gacttcctag ggggtgctga gtgttccta 480
ggacagattg tgtccagcca ggtactgact ctccccttga tgctgaagct ggaaaacctg 540
ctgggcgggg gaccatcacg gtctcagctc aggaattaaa ggacaatcgt gtagtaacca 600
tggaggtaga g                                     611

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<210> 345

<211> 344

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (289)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (296)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (329)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (331)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (342)

<223> n equals a,t,g, or c

<400> 345

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tttccttcta cagtattcct gaatttgacg aatggaaaaa acatatagaa aaccagaaag 60
cctggaaaat aaagtactat aaaggattgg gtactagtac agctaaagaa gcaaaggaaat 120
atattgctga tatggaaagg catcgcatct tgtttagata tgctggtcct gaagatgatg 180

```

```

ctgccattac cttggcattt agtaagaaga agattgatga cagaaaagaa tggttaacaa 240
atatttatgga agaccggaga cagcgtagct acatggctta ccagaggant gattcnctct 300
caactcagac atgaaagatc tataccacnc ntgttgatgg cntt 344

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<210> 346

<211> 506

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (392)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (452)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (453)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (472)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (480)

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<220>

<221> misc feature

<222> (495)

<223> n equals a,t,g, or c

<400> 346

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tgggattggg cttctttttt cttcagttag ttttttcccc aacaggttct gatggtcctt 120
tggtaccag caaacagtc cctgcagaaa agtcagggtt tccagtgggt cctgagaacg 180
gagtagaact ttccaaagag gagctgatcc gcaggaagcg cgaggagttc attcagaagc 240
atgggagggg tatggagaag tccaacaagt ccacgaagtc agatgctcca aaggagaagg 300
gcaaaaaaagc accccgggtg tgggaactgg gtggctgtgc taacaaagaa atgttggatt 360
acagtacttc caccaccaat ggaaccctg angcttgctt tgtctgagga cattaacctt 420
gattccaagg gactgggtct ggggggcact tnnngatctg gactgcacac tntgatgaen 480
aagggttgt taaantttcc aaacta 506

```

<210> 347

<211> 444
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (289)
<223> n equals a,t,g, or c

<400> 347
cggaagggag accatgttcc gagcggcggc tccggggcag ctccggcggg cggectcatt 60
gctacgattt cagagtaccc tggtaatagc tgagcatgca aatgattccc tagcacccat 120
tactttaaat accattactg cagccacacg ccttggaggt gaagtgtcct gcttagtagc 180
tggaacccaaa tgtgacaagg tggcacaaga tctctgtaaa gtagcaggca tagcaaaaagt 240
tctgggtggct cagcatgatg tgtacaaagg cctacttcca gaggaactna caccattgat 300
tttggcaact cagaagcagt tcaattacac acacatctgt gctggagcat ctgccttcgg 360
aaagaacctt ttgccagag tagcagccaa acttgagggt gccccgattt ctgacatcat 420
tgcaatcaag tcacctgaca catt 444

<210> 348
<211> 358
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (19)
<223> n equals a,t,g, or c

<220>
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<222> (52)
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tgcagcttca ttttgagtgc agacttcctt gctttggttg tgaaaggcca gtggtcttgc 180
agctggnaaa aggggtgatt gttgcaaaga gcaaagaaga ggcctgcaag ctgtacaaga 240
gatcatgcag gtaggctggg tcttctggaa aaatttactn ttgtattcat actgnatgaa 300
ntaccgtttt aagtttnaaa aatgttcctc acattaaggg aaattctntt ttgcaacc 358

<210> 349
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tgctgcagtg gtatgagccg ctgcagaagt ttctgctgct gaagaacttc tccagccctc 180
tgcccanccc agctgggatg ctgganccgc tgggtgctga tgggaaggag ctgccgcagn 240
gtttttttgg ggccgaaggg cctaaagggc ccggttgccg gttcctgttc caanncctgc 300
ncctgggagg ttgcnttaa g 321

<210> 350
<211> 742
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<220>
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<222> (658) *
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<222> (702)

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<220>

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<222> (707)

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<400> 350

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cgtgggcaac cgggtgtaca tggcctgcct gtatgtttat aacaaaatcg accagatctc 180
catggaagag gtggaccgcc tggcccgaaa acccaacagt gtgggtcatca gctgcggcat 240
gaagctgaac ctggactatc tgctggagat gctctgggag tacttggccc tgacctgcat 300
ctacaccaag aagagaggac agaggccaga cttcacagac gccatcattc tccggaaagg 360
ggcctcagtg gagcacgtgg gcaccagcac caagtacagt ccgcagcggg tgggcctgac 420
ccacaccatg gagcatgagg acgtcatcca gatcgtgaag aagtaacggc gcctgccggg 480
ccttcgcgcc acctgctcgt ctcccttggg aggtggtccc actgggacac acaaacaccc 540
aaacagaaaa atacaaatac acgtacccca agaaggggtc cctcaagtct ctgctattta 600
cagaagtttc ttcagtangc agacaaaaaa tgtgttgggc aaaagggctc ggntggangc 660
atttccata agactgagcc ctnttcatng ggggttttga gnttgantgc ttancctgna 720
tntgtgctc caanccctg ac 742
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<210> 351

<211> 272

<212> DNA

<213> Homo sapiens

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<222> (167)

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<220>
<221> misc feature
<222> (251)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (272)
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<400> 351
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gggctgacgt ttaaccagac cagcgagtca ctcagcgcac tgggtaaggc gggggtaagc 120
ggtgaggctc agattgcgtc catcagccag agtgtggcgc gtttctnctc tgcacccggc 180
gtggagggtg acaaggctcg tgaagccttc gaggggggccc cgtacccatt tgcctatagt 240
aagcgtatta naataattgc cgtgttttaa an 272

<210> 352
<211> 256
<212> DNA
<213> Homo sapiens

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<400> 352
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gcgggggcccc agctgggacc ccttccgcga ctggtaccgg catagccgcc tcttcgacca 120

ggccttcggg ctgccccggc tgccggagga gtggtcgcag tggtaggcn gcagcagctg 180
gccaggctac gtgcgcccc tgccccccgc cgcacgcaga gccccgcagt ggccgngccc 240
gctacagncg nncgct 256

<210> 353
<211> 592
<212> DNA
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<220>
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<221> misc feature
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<220>
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<222> (545)
<223> n equals a,t,g, or c

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acttcactcc tggggccagc aagaccacga gtgcaccgag aggaatgaac aactctggac 180
acaccatctt taagaaccgt aatactcacc gcaaggtctt gcaacttcat tcttgaagtc 240
agttagggcca agaaccatc aattccgtac acatttnggt gactttgaag agactgtcac 300
ctatcaccaa gtgtgagac tattgccaag cagtgaact attgccaagt ggtgagacca 360
tcaccaagcg gtgagactat cacctatcgc caagtgggtc taagtgtgaa cgtgaagtcc 420
ccagccctgc tgctgagcca gttgctgccc tacatggaga acaagaaggg tgctgtcatn 480
ctggntcttt ccattgcagc ttataatcca gtagtggcgc tnggtgtcta caatgtcagc 540
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<210> 354

<211> 539

<212> DNA

<213> Homo sapiens

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<220>

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<222> (223)

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<220>

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<222> (225)

<223> n equals a,t,g, or c

<400> 354

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aactagtgga tccccggggt tgcaggaatt cggcacgagt cgtctcaggc tcgtagttcg 120
ccttcaacat gccggaacca gcgaagtccg ctcccgcgcc caagaagggc tcgaagaaag 180
ccgtgactaa ggcgcagaag aaggacggca agaagcgcaa ggnanccgca aggagagcta 240
ctccgtatac gtgtacaagg tgctgaagca ggtccacccc gacaccggca tctcctctaa 300
ggccatggga atcatgaact cttcgtcaa cgacatcttc gaacgcacgc cgggtgaggc 360
ttccgccttg gcgcattaca acaagcgctc gaccatcacc tccagggaga tccagacggc 420
cgtgcgcctg ctgctgcccg gggagttggc caagcacgcc gtgtccgagg gcaccaaggc 480
cgtcaccaag tacaccagcg ctaagtaaac ttgccaagga gggactttct ctggaattt 539

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<210> 355

<211> 435

<212> DNA

<213> Homo sapiens

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<222> (396)
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<400> 355
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atgaggacac actctctgtg gcactgccat atttctggga gcactttgat aaggacggct 120
ggtcctctgtg gtactcagag tatcgcttcc ctgaagaact cactcagacc ttcattgagct 180
gcaatctcat cactggaatg ttccagcgac tggacaagct gaggaagaat gccttcgcca 240
gtgtcatcct ttttgaacc aacaatagca gctccatttc tggagtcttg gtcttncng 300
gccaggagct tgcctttccg ctgagtccag attggcaagt ggactacgaa gtcatacaca 360
tggcggaac tggatctggc aagcgaggag acccanacgc tggttcgaga gtacttttnc 420
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<210> 356
<211> 502
<212> DNA
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<222> (316)
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gaagaatgaa cagaagggag agaagattcc tcggtgcttg ccagtttggt ggaagcccg 120
gaaccccggtg gaacagaggc agcgcatcat cggaggggcaa aaagccangg ggatagtggg 180
ggcggtttttg cagtaaggga cccgaacact gatcgctggg tggccacggg catcgtgtnc 240
ctngggcatc gngtgcagca gggccttatg gcttnttaca ccaaagtnc cnaacttncg 300
tggccttgga tcaagnnaga cctngganca ggaggactnc cgccccanca ttcactaggt 360
tccnaatcca gngagcagtt tcgcanaaan canccanaca cancttcccc ctntttngnn 420
accnncnagn gtctctnttn anathcctnc tngcacnna ncccacaacc ccccnncnc 480
ccccncccc ccccnncnc cc 502

<210> 357
<211> 440
<212> DNA
<213> Homo sapiens

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<222> (316)
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<222> (407)
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<220>
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<222> (418)
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<221> misc feature

<222> (426)

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<400> 357

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aaagaatccg cataccagga agggcgctgg gaaacactgc cctttcagcg ggccatcatg 180
aatgcgaatg ggcagcgact acatccgtga gtggaatgtg gtgaagtgtg cccgtntcgg 240
ttattccaaa atgctgctgg gngtttatgc ctactttata gggcataagc agnggaacan 300
ccttatttgg tttccncagg atggtggatg cccgagaant ttttgaaaaa cccacgttgn 360
gncgattatt tcgggganat ttccgngnt gttgggggtt gncccntgg gttttggnaa 420
aaaganccgg gtaaaagggtt                                     440
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<210> 358

<211> 234

<212> DNA

<213> Homo sapiens

<220>

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<222> (208)
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taaatttttt gctgacctgc tggattacat caaaggactg antagnaaat agtgnataga 180
tccattcctc atgaactgtg gatttttngc agatctgaag agctattgtn atga 234

<210> 359
<211> 668
<212> DNA
<213> Homo sapiens

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<220>
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<222> (19)
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<220>
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<220>
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<220>
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<220>
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<220>
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 <222> (667)
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 aagctgggtac gcctgcaggt accggtccgg aattcccggg tcgaccacg cgtccggggg 120
 gtttgaggta cataagaaaa atgtaagggg tgaattcact tattatgaaa tacaagataa 180
 tacagggaag atggaagtgg tgggtcatgg acgactgacc acaatcaact gtgaggaagg 240
 agataaactg aaactcacct gctttgaatt ggcaccgaaa agtgggaata ccgngaggt 300
 gagatctgta attcatagtc acatcaaggt catcaagacc aggaaaaaca agaaagacat 360
 actcaatcct gattcaagta tggaaacttc accagacttt ttcttctaaa atctggatgt 420
 cattgacgat aatgtttatg gagataaggt ctaagtgcct aaaaaaatgt acatatacct 480
 ggttgaaata caacactata catacacacc ancatatata ctagcttggt aatcctatgg 540
 aaatggggta tntggagnnc ttttttaatt tttcatagnt tttttttnat aanaatggca 600
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<210> 360
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 <212> DNA
 <213> Homo sapiens

<400> 360

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caccattacc agcggcggca atcctccggc cttttccctg acaccggacg gaaagctgac 60
cgctaaaaat gcggatatca gtggcagtgat gaatgcgaac tccgggacgc tcagtaatgt 120
gacgatagct gaaaactgta cgataaacgg tacgctgagg gcggaaaaaa tcgtcgggga 180
cattgtaaag gcggcgagcg cggcttttcc gcgccagggtg gaaagcagtg tggactggcc 240
gtcaggtagc cgtactgtca ccgtgaccga tgaccatcct tttgatcgcc agatagtggg 300
gcttccgctg acgttttcgag gaagtaagcg tactgtcagc ggcaggacaa cgtattcgat 360
gtgttatctg aaagtactga tgaacgggtg ggtgatttat g 401
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<210> 361

<211> 273

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (156)

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<220>

<221> misc feature

<222> (189)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (236)

<223> n equals a,t,g, or c

<400> 361

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accggaacac ggcactgggc ggcgtgcagg tggactcgga gcagttcggc agccagcagg 60
tgagccgtaa ttatcatctg cgcgggcgta ttctgcagggt gccgtcgaac tataaccgcg 120
agacgcggca atacagcggg atctgggacg gaacgnntaa accggcatac agcaacaaca 180
tggcctggng tctgtgggat atgctgaccc atccgcgcta cggcatgggg aaacgncttg 240
gtgcggcgga tgtggataaa tgggcgctgt atg 273
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<210> 362

<211> 248

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (5)

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<220>

<221> misc feature

<222> (37)

<223> n equals a,t,g, or c

<220>
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<222> (145)
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<220>
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<222> (161)
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<220>
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<222> (185)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (194)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (210)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (218)
<223> n equals a,t,g, or c

<400> 362
cgctcngtcgg gcgagcgatg atgcggaagg ttacctngat nttttcaaag gnaagataac 60
cgaatcccat ctngcaagg agctgctgga aaaagtcgag ctgacggagg ataacgccag 120
cagactggag gagttttcga aagantggaa ggatgccagt nataagtga atgcatgtg 180
ggctntcaaa attnagcaga ccaaagacgn caaacgantt ttattctgct atttagtagt 240

aagatcag

248

<210> 363

<211> 149

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (131)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (137)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (144)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (145)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (147)

<223> n equals a,t,g, or c

<400> 363

tgccggactt tcacgtgag gatgactggt ggcgtaacgg ccagaatctc tatctggata 60
atctggaggc gacggggctg taccaggtgc cgttggtcagc ggcacagccg ggcgatgtgc 120
tgctgtgctg ntttgntca tcannngcg . 149

<210> 364

<211> 352

<212> DNA

<213> Homo sapiens

<220>

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<222> (4)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (93)

<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (196)
<223> n equals a,t,g, or c

<220>
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<222> (319)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (322)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (325)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (338)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (340)
<223> n equals a,t,g, or c

<400> 364
gcanaaagaa aatggcacag taacagctgc caatgccagt acactgaatg atggagcagc 60
tgctctggtt ctcattgacg cagatgcagc gangaggctc aatgttacac cactggcaag 120
aatagtagca ttgtctgacg ctgctgtaga acctattgat ttccaattg ctcctgtata 180
tgctgcatct atggtnccta aagatgtggg attgaaaaaa gaagatattg caatgtggga 240
agtaaatgga agcctttagt ctggttgtag tagcaaacaat taaaaatgtt ggagattgga 300
tccccaaaaa gtgaatatnc anggnaggag ctgtttcncn ggggacatcc ca 352

<210> 365
<211> 272
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (37)
<223> n equals a,t,g, or c

<220>
<221> misc feature

<222> (42)
<223> n equals a,t,g, or c

<220>
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<222> (44)
<223> n equals a,t,g, or c

<220>
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<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

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<220>
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<220>
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<222> (190)
<223> n equals a,t,g, or c

<220>
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<223> n equals a,t,g, or c

<220>
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<222> (242)

<223> n equals a,t,g, or c

<220>

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<222> (260)

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<220>

<221> misc feature

<222> (261)

<223> n equals a,t,g, or c

<400> 365

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ggcttgtgcc gctgctggan tgacagcett ncgaggcttt gctgtctcgg cacggnagggt 120
ctggcaaacc anggacagac caggnacatg ggaccaaagc cggaacctcc tgetcaacgg 180
gaagtcctan ccaccaaag tgcgcctgat ctgggggggc tccctncccc cagtcaacgg 240
gncggcggat gaactggatn nacgccccgg at 272
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<210> 366

<211> 254

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (23)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (192)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (208)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (209)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (236)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (244)

<223> n equals a,t,g, or c

<400> 366

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ggctctacta ggactcacta tanggaaagc tggtagcgcct gcagggtaccg gtccggaatt 60
cccggggtcga ccacgcgctc cgcttctctg cctagaaggg ataatattat cactcttcgt 120
tataataaca atcaccatct taattaacca ccttacatta gccagcataa cccctatcat 180
ccttcttgta tntgcagcct gtgaagcnnn actgggggctt atccctttta gttatnatct 240
caantacata cgga                                     254
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<210> 367

<211> 185

<212> DNA

<213> Homo sapiens

<400> 367

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gattggattc gacaacaaaa aagacctgct tatctcgggtg ggcgatttgg ttgatcgtgg 60
tgcagagAAC gttgaatgcc tggaaattaat cacattcccc tgggtcagag ctgtacgtgg 120
aaaccatgag caaatgatga ttgatggctt atcagagcgt ggaaacgtta atcactggct 180
gctta                                     185
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<210> 368

<211> 458

<212> DNA

<213> Homo sapiens

<220>

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<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (4)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (6)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (15)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (27)

<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (170)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (193)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (232)
<223> n equals a,t,g, or c

<220>
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<222> (246)
<223> n equals a,t,g, or c

<220>
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<222> (250)
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<220>
<221> misc feature
<222> (316)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (340)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (395)
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<220>
<221> misc feature
<222> (399)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (404)
<223> n equals a,t,g, or c

<220>

<221> misc feature
<222> (415)
<223> n equals a,t,g, or c

<220>
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<222> (433)
<223> n equals a,t,g, or c

<400> 368
agnncnatag aaagnacgcc tgcaggnacc ggtccggaat tcccgggtcg acccacgcgt 60
ccggagttag ccttgaacgc ctggacctgg acctcacagc tgacagccag ccacccgtct 120
tcaaggtcctt cccaggcagt accactgagg actacaacct tattgttatn gaacgtggcg 180
ctgccgctgc acnaccggcc agccagggac tgcgcctgca ggaaccctcg gngccccacc 240
cctggntggn atggccattg tcaaggagga ggagacggag gctgccattg gagccctcc 300
tactgccact gagggncctg agaccaaacc tgtgcttatn gctcttgagg agggtcctgg 360
tgctgagggt tcccggctgg actcactagt ggcanaacna ctcnnggctgg aagtngtagc 420
tctgagggac tcngccccag tgttggccgg gacctgat 458

<210> 369
<211> 288
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (15)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (17)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (47)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (56)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (71)
<223> n equals a,t,g, or c

<220>
<221> misc feature

<222> (103)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (114)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (225)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (239)
<223> n equals a,t,g, or c

<400> 369
gcgctggagc tgctngngca ctgcgggcgtg tgcagagagc gcctgcnacc cgaganggag 60
ccccgcctgc ngccctgttt gcactcggcc tgtagtgcct gentagggcc cgcngccccg 120
ccgcccga cagctcgggg gacggcgggg cggcggggcga cggcaccgtg gtggactgtc 180
ccgtgtgcaa gcaacagtgc ttctccaaag acatcgtgga gaatnatttc atgcgtgana 240
gtggcagcaa ggctgccacc gacgcccagg atgcgaacca gtgctgca 288

<210> 370
<211> 292
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (47)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (53)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (60)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (61)
<223> n equals a,t,g, or c

<220>

<221> misc feature
<222> (101)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (141)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (263)
<223> n equals a,t,g, or c

<400> 370
ccatctttgc attgttcctc atccgcctcc ttgctcgccg cagccgntc cgncgcgcgn 60
ntcctccgcc gccgcggact ccggcagctt tatcgccaga ntccctgaac tctcgctttc 120
tttttaatcc cctgcatcgg ntcaccggcg tgccccacca tgtcagacgc agccgtagac 180
accagctccg aaatcaccac caaggactta aaggagaaga aggaagtttt ggaaagaggc 240
agaaaatgga agagacggcc ctncctaacg gggaatgcta atttagggaa at 292

<210> 371
<211> 477
<212> DNA
<213> Homo sapiens

<220>
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<222> (35)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (276)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (313)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (342)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (374)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (399)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (410)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (427)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (434)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (447)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (448)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (451)
<223> n equals a,t,g, or c

<400> 371
ggcacaggat aattttaagc atttaaatgg aattnatctt tttcactgta ttgatccaaa 60
tggttccaag cataaaagaa cggacagatc aattttatgt tgtttacgaa aaggagaatc 120
tggccagtca tggcaagggt taacaaaaga aagggcaaag cttaattggc ttagtgctga 180
cttcaataat tgggaaagac tgggaagatg attcaaatga agacatgtct aattttgaat 240
cgtttctctg aggattcaca agacagtgat gatggnaaaa atgccagatc tgggagtaag 300
ggaatattgt ccntcacctg ggtttttgag gaaaggaaaa tnaactttct ctggcaagggt 360
tttccataat ttgngaggaa ttccccgagt ttgttagcnc cttaaagggn gttatgctcg 420
tatttgnccc actntaacc ctttttnnca nccggtttgt ttttttaaaa gggcttc 477

<210> 372
<211> 443
<212> DNA
<213> Homo sapiens

<220>

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<220>
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<222> (67)
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<220>
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<222> (74)
<223> n equals a,t,g, or c

<220>
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<222> (107)
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<220>
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<220>
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<222> (123)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (171)
<223> n equals a,t,g, or c

<220>
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<222> (174)
<223> n equals a,t,g, or c

<220>
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<222> (220)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (222)
<223> n equals a,t,g, or c

<220>
<221> misc feature

<222> (293)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (314)
<223> n equals a,t,g, or c

<220>
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<222> (329)
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<220>
<221> misc feature
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<223> n equals a,t,g, or c

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<221> misc feature
<222> (340)
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<220>
<221> misc feature
<222> (351)
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<220>
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<222> (364)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (373)
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<220>
<221> misc feature
<222> (407)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (411)
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<220>
<221> misc feature
<222> (426)

320

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (430)

<223> n equals a,t,g, or c

<400> 372

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agaaganatc ctnnaccctt gtaggaatgt ttttgaaact aaatttnatg aacgtnaaat 120
ttncacagtgg ttattatgaa cttccttgtc gaagttgaaa ggtgaacaac nctnatattg 180
caaataccgt agagcttcag agtgcaagat tctccactgn angttgggca ttcacaaatg 240
ttggatcttt cccaccgtgg gatgaagggt tcagaggcat tgcacccaaa atnaccggg 300
tgaacatacc cagnccaaag cccaggggna cattnatcgn ggacaggccc nccagaattt 360
ggcntgttct ttncacgttg gtaggtgtgg aacttggggg tgaattnatt ncttaaccga 420
attnccgn ttccttaacc gag 443
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<210> 373

<211> 464

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (20)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (235)

<223> n equals a,t,g, or c

<400> 373

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gagacttggg gatggaaccg cacagagccg cgggcccttt gcagctgcca ttttcgccct 120
acgttttcaa cggaggtact atactggcaa ttgctggaga agattttgca attggtgctt 180
ctgatactcg attgagtga gggttttcaa ttcatacgcg ggatagcccc aaatnttaca 240
aattaacaga caaacagtc attggatgca gcggttttca tggagactgt cttacgctga 300
caaagattat tgaagcaaga ctaaagatgt ataagcattc caataataag gccatgacta 360
cgggggcaat tgctgcaatg ctgtctacaa tcctgtattc aaggcgcttc tttccatact 420
atgtttacaa catcatcggt ggacttgatg aagaaggaaa gggg 464
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<210> 374

<211> 369

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (216)

<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (218)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (219)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (221)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (332)
<223> n equals a,t,g, or c

<220>
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<222> (357)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (360)
<223> n equals a,t,g, or c

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<221> misc feature
<222> (363)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (369)
<223> n equals a,t,g, or c

<400> 374
ggcacagcct ctacagccat gtattcggct cctggcagag acttggggat ggaaccgcac 60
agagccgcgg gccctttgca gctgcgattt tcgccctacg ttttcaacgg aggtactata 120
ctggcaattg ctggagaaga ttttgcaatt gttgcttctg atactcgatt gagtgaagg 180
ttttcaattc atacgcggga tagcccaaa tggtgcnna ntaacagaca aaacagtcat 240
tggatgcagc ggttttcatg gagactgtct tacgctgaca aagattattg aagcaagact 300
aaagatgtat aagcattcca ataataaggc cntgactacg gggggcaatg ctggcangcn 360
gtinctacan 369

<210> 375

322

<211> 313
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (32)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (249)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (259)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (268)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (293)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (308)
<223> n equals a,t,g, or c

<400> 375
tacccttcat cactaaaggc cgcctgtgcg tnttttttta cgggattttt ttatgtcgat 60
gtacacaacc gcccaactgc tggcggcaaa tgagcagaaa tttaagtttg atccgctggt 120
tctgcgtctc tttttccgtg agagctatcc cttcaccacg gaggaaagtc tatctctcac 180
aaattccggg actggtaaac atggcgctgt acgtttcgcc gattgtttcc ggtgaagggt 240
atcccgttnc cctggcggt tccacctntg aatttaaggc cgggataatg tcnaagccc 300
aagcatgnaa gtg 313

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<211> 375
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<400> 376
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agcggtgtg cgcttctgga gcgggggcca ctccggacac ggctatagag gaaatcaaag 180

agaaaatgaa gactgtaaaa cacaaaatct tggattgtc tgggaaaggc ggtgttggga 240
aaagcacatt cagcgccac cttgccatg gcctagcaga ggatgaaaac acacagattg 300
ctcttctaga catcgatata tgtgggccat cgattcccaa gataatggga ttggaaggag 360
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<210> 377

<211> 434

<212> DNA

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<400> 377

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tgaagtgcac acagacacca acaagnttgc ngaatttctg nancagtgctc tgtgccctcc 180
caggtagccc aancctggcag ctctgaaccc tnantccaac acagctgngc tgganataatt 240
tgncaaattn tctgcctaca tnnnnanttc aaaccacgna ctcaatgaca atctggagaa 300
nggactcctg aaagccctgn acgttttagn caattantta acatcccccc nctcagaaga 360
agtggatgan accagtgcctg nagtgaaggt gtctctcaga agaagttntt ggatagcacg 420
agctcaccct gggg                                     434
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<211> 506

<212> DNA

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ttccttaatt ctntgctggc tgataatcat cacctgcagg ttggctccaa ttatttgtat 180
attcataaaa tcgatggaaa aacttttctc tttaacaaaa caaatgacaa gagtctgggt 240
cagaagataa atcgctctaa agcttcagtt gaagatatta agaacagcct cgtngatgac 300
ggaatcattg ggattcccat cttttttgtt tgttgaaggc gacaccattg gtttttgcca 360
gaactgnttt tcgggncggc cacatncgnt tttagacagg ttttttaatc ggggaaggga 420
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329

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agacccggaa acttaggggc cacgtgagcc acggccacgg ccgcataggc aagcaccgga 180
agcaccgccg cgccgcgggt aatgctggtg gtctgcatca ccaccggatc aacttcgaca 240
aataccaccc aggtactttt gggaaagtgt gtatgaagca ttaccactta aagaggaacc 300
agagcttctg cccaactgtc aaccttgaca aattgtggac tttggtcagt gaacagacac 360
gggtgaatgc tgctaaaaac aagactgggg ctgctcccat cattgatgtg gtgcgatcgg 420
gctactataa agttctggga aagggaaagc tcccaaagca gcctgtcatc gtgaaggcca 480
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330

<400> 380

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ccgctctaga actagtggat cccccgggct gcaggaattc ggcacgagcg caaagaaggg 120
tggcgagaag aaaaagggcc gttctgccat caacgaaggn taaccgaga atacaccatc 180
aacattcaca agcgcattcca tggagtgggc ttcaagaagc gtgcacctcg ggcactcaaa 240
gagattcggg aatttgccat gaaggagatg ggaactccag atgtgcgcat tgacaccagg 300
ctcaacaaag ctgtctgggc caaaggaata aggaatgtgc cataccgaat ccgtgtgcgg 360
ctgtccagaa aacgtaatga ggatgaagat tcaccaaata agctatatac ttgggttacc 420
tatgtacctg ttaccacttt caaaatttct gtgctaaaca gtgttacagt cgccaagagc 480
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ctgagctgca gcagatgcct ttacaaccaa gct 573
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gcagcaatgg ccaagatcaa ggctcgagat ctctcgcgga agaagaagga ggagctgctg 180
aaacagctgg acgacctgaa ggtggagctg tcccagctgc gcgtcgccaa agtgacaggc 240
ggtgcggcct ccaagctctc taagatccga gtgcgccgga aatccattgc ccgtgttctc 300
acagttatta accagactca gaaagaaaac ctccaggaaat tctacaaggg caagaagtac 360
aagcccctgg acctgcggcc taagaagaca egtgccatgc gccgccggct caacaagcac 420
gaggagaacc tgaagaccaa gaagcagcag cggaaggagc ggctgtaccc gctgcggaag 480
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<211> 300

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accatccgca gagatgcccc tgctggccgc aaagtgggtc tcattgctgc nngcnggant 180
ggangtctcn ggggaaccaa gantgtgcag gagaaagaga actagtgtcg agggcctcaa 240
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<210> 383

<211> 475

<212> DNA

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ccggggccga ggccgcggac tcgcgnaggc aaggccgagg ataaggagtg gatgcccgtc 180
accaagtgg gccgcttggt caaggacatg aagatcaagt ccctggagga gatctatctc 240
ttctccctgc ccattaagga atcagagatc attgattctt cctggggggt ctctcaagga 300
tgagttttga agatatgcca tgcagaagca gaccctgccg gccacgcacc agttcaagca 360
ttnttgnaac gggattaaat gccactcgtt tggtttaatg nccnagagtg gcacncatcc 420
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<210> 384
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angagattaa ncagagacac aggcaattgt atgtcagcag ctngatttaa cccacctaaa 120
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<211> 317

<212> DNA

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aagctgtccc acttacagat gcacagcagg naagcacact ggtgagaaac cataccagtg 180
tgacttnaag gactgtgaac gangttttct cggtcagacc agctcaaaag ncaccaaagg 240
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gaccaacnga ngaccna 317

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cggcagcgcc atgagactcc tcccccgctt gctgctgctt ctcttactcg tgttccctgc 180
cactgtcttg ttccgaggcg gccccagagg cttgttagca gtggcacaag atcttacaga 240
ggatgaagaa acagtagaag attccataat tgaggatgaa gatgatgaag ccgangtaga 300
agaagatgaa nccacagatt ttgtagaaga taaagaggaa gaagatgtgt ctggtgaanc 360
tgaaacttta ccgagtgcag atacnactat actgttttta aaggngnaga ttttccgcca 420
ataacantgt gaa 433

<210> 387
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<212> DNA
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gctttcctcc cccatctaca tcgatctgcg gggcatcgtg tctcgaccgc gtcttctgag 180
tcagggtgca gatattttat tccaaactgc ccaaaatgca ggcatacagtt ttgacaccgt 240
gtgtggagtg ccttatacag ctttgccatt ggctacagtt atctgttcaa ccaatcaaatt 300
tccaatgctt attanaagga aagaacaaca ggattatgga actaagcgtc ttgtanaang 360
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<210> 388

<211> 244

<212> DNA

<213> Homo sapiens

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<220>

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<400> 388

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caatgatgtc tgccatcttt cattaatccc tgaactgttg gtttaatcgc ttgaggggtga 180
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ttcc

244

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<211> 239

<212> DNA

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ctgncgcccg ncgtgatgcc agggaagaca gggcgacctg gaagtccaac tacttnctta 120
agatcatnca acgtattggg atgattatcc taaaatgggt tcnattgggt ggtagcgagt 180
acganatgggt ggggcntcct anagntagta tggcgagcta gagtcccggc taatgttcc 239

<210> 390
<211> 382
<212> DNA
<213> Homo sapiens

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<220>
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<222> (221)
<223> n equals a,t,g, or c

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<222> (235)
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<222> (342)
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<400> 390
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cgcgctgcnc gcacactgag gccgcccggg acaaagcccg gnntcggngc gacctttggt 120
cccgginctca gtgagcgagc gagcgcgagc agagggagtg gccaaactna tcactagggg 180
ttccttgtag tnaatgatta acccgccatg ctacttngnc nacgtagcca tgggntacca 240
agctcgagct ctctagactc gacgcgcgta atacgactca ctatagggcg aatttgagct 300
ccaccgcggt tgcggccgct ctactagagt cgacctcatg gnttnncccc gaaacccgcn 360
aacaccgcgt gacncgccct ta 382

<210> 391
<211> 375
<212> DNA
<213> Homo sapiens

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<220>
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<222> (48)
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<220>
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<220>
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<222> (104)
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<220>
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<220>
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<222> (146)
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<220>
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<220>
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<222> (223)
<223> n equals a,t,g, or c

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<220>
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<222> (299)

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<220>

<221> misc feature

<222> (351)

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<222> (366)

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<220>

<221> misc feature

<222> (370)

<223> n equals a,t,g, or c

<400> 391

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cgggtgcagn tgccaggggtg gcctgagcga tctacggatg ggcngtatgg agtggangag 120
acgagatgcg ggtgttanag caggginctga ccggagtgnс acacatgagt gtcaggtgca 180
gtagtccga gtcggcgaca tgagcctnga gtagagtcac cantcgatga gatctggagg 240
caactggcga gcaagaccgt ntggtgcant gtcantcang ctgttgсagg tgagagcant 300
gcactcgtcg agtggcgaga cagatcaatc tctgttagcg ggtggaggtt nactcgcgc 360
tgtggnggtn cactg 375
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<210> 392

<211> 121

<212> DNA

<213> Homo sapiens

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<220>

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<222> (9)

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<220>

<221> misc feature

<222> (13)

<223> n equals a,t,g, or c

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<220>
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<222> (118)
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<220>
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<222> (120)
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<400> 392
gantcatcng agngtgtgga tttagagccgc cgcatttttt aacctaaat ctgcanatgc 60
atcgtgnttc ctgtccattg gactgtaagg tttagttagg catcttgga acnatggnan 120
a 121

<210> 393
<211> 83
<212> DNA
<213> Homo sapiens

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<220>
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<222> (66)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (70)
<223> n equals a,t,g, or c

<220>

<221> misc feature
<222> (73)
<223> n equals a,t,g, or c

<400> 393
ggcagagaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60
aaaanncccn gnggggggcc ccc 83

<210> 394
<211> 218
<212> DNA
<213> Homo sapiens

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<223> n equals a,t,g, or c

<220>
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<400> 394
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aggncctcgg tcagcgactg gatgctcgcc atcaaggtcc agtggaagtt cttcaagagg 120
aaaggcgccc ccgccccagg cttccgcgcc cagcgctcgc cagctcagtt gcccgtttta 180
ccaataaact gagcgacccc aaaaaaaaaa aaaaaaag 218

<210> 395
<211> 83
<212> DNA
<213> Homo sapiens

<220>
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<220>
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<222> (13)
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<220>
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<222> (83)
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<400> 395
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aaaaaaaaaa aaaaaaaaaa aan

83

<210> 396

<211> 70

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (69)

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70

<210> 397

<211> 140

<212> DNA

<213> Homo sapiens

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<220>

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cgcccccaaa acanataacc aattgtattt atngaaaaat aaatagatac aannnactaa 120
acatagcaat tcagatctnt 140

<210> 398
<211> 157
<212> DNA
<213> Homo sapiens

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<222> (65)
<223> n equals a,t,g, or c

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<222> (121)
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<222> (134)
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<222> (150)
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<400> 398
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atggnaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120
nnnccngggg gggncceccc cccccctttn cccccctt 157

<210> 399
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<212> DNA
<213> Homo sapiens

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<222> (84)
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<222> (204)
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<222> (302)
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<220>
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<222> (305)
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<220>
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<222> (308)
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<220>
<221> misc feature
<222> (331)
<223> n equals a,t,g, or c

<220>
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<222> (341)
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gcaagcgcca tatgagcctg gcgncgcca tagcgaatcc tgttgtgggc tttttggcct 120
attcccggcc ctgactcttg ccgggatggc accgcccgc taggacttcc agggttgggc 180
tgagtgggag ttcgactgct gggncctngta attctcgctt tgggggctgc tccttccagg 240
ctggggacac actggggccc gttgttcggt ctcccgctct ccgacatctt gtctggaact 300
tncgncctngc agtttccata ggagttggag nctgtgcggc ntaattttgg tggaaaaa 358

<210> 400
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<212> DNA
<213> Homo sapiens

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<222> (218)
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<400> 400

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aaaacccaan tcagagtatc canaaatcca agccaggtca aaaccaaacc gaaantntca 120
agcaatccaa atcaagtcaa aaacaaaaac caaagtgccg gtacaggcnt nccgtgggtg 180
atcaggccac ccttccactc aaatggagtg ggnaantncc aaagactagt nttaccaant 240
ttcanatntc cggantccaa gngcctgtnc cttcccagng tttagccgct gnattgatcc 300
tctgtggggg cctgcnaaac gccantctgg cgaggtgttc cactggggna attgcctacc 360
cggnagtgtc ctcaggttct gngtccctca agctggcca 399
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<210> 401

<211> 189

<212> DNA

<213> Homo sapiens

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<222> (162)

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<222> (165)

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<222> (166)

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<222> (187)

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<400> 401

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acaattgttg aaacctgcta tacatgttta ttttaataaa ttgatggcaa aaaaaaaaaa 120
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa anccnngggg ggggcccccc 180
ccccccntt                                     189
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<210> 402

<211> 174

<212> DNA

<213> Homo sapiens

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<222> (103)

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cctctgacac tcnagcctgg gtgacagagc gagactccgt ctnaggnaag gaaaaaaaaa 120
aaaaaaaaan cncggggggg gccccngtnc ccaattggcc ctatagnngg tcgt 174

<210> 403
<211> 263
<212> DNA
<213> Homo sapiens

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<220>
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<222> (242)
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<220>
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<222> (260)
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355

<400> 403

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 ctgggaccac aaggaggag actgcacccc actgcctctg ggccctggct gtgggcagag 120
 gccaccgtgt gtgtcccgag taaccgtgcc gttgtcgtgt gatgccataa gcgtctgtgc 180
 gtggagtccc caatgaaacc tgtggctcctg cctgggcaaa aaaaaaaaaa naaanaaaa 240
 anaaagaaaa anaaaaaaan aaa 263

<210> 404

<211> 478

<212> DNA

<213> Homo sapiens

<220>

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<222> (159)

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<220>

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<222> (259)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (427)

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<400> 404

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 aagtcttgaa gaggcggggc agccaggctg acatctgtgt ttcaagtggg gctcgccatg 120
 ccgggggttc ataggtcact ggctctccaa gtgccagang tgggcagggtg gtggcactga 180
 gcccccccaa cactgtgccc tgggtggagaa agcactgacc tgtcatgccc cctcaaacc 240
 tcctcttctg acgtgcctnt tgcaccctc ccattaggac aatcagtcct ctcccatctg 300
 ggagtcctct tttcttttct accctagcca ttcttggtac ccagccatct gcccagggt 360
 gccccctcct ctcccatccc cctgccctcg tgggcagccc ggctggtttt gtaaatgtgg 420
 gttgtgnaca gtgatttttt cttgtattta aaaaggcca gcattgtggt tcattaaa 478

<210> 405

<211> 223

<212> DNA

<213> Homo sapiens

<220>

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<220>

<221> misc feature

<222> (158)

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<220>
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<222> (172)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (217)
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<220>
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<222> (223)
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tgccgaatca actagccctg aaaatggatg gcgctggagc gtcggggcca taccgcgccg 120
tcgcccggcag tcgagagtgg acgggancgg cggggggcngc gcgcgcgcgc gncgtgatgg 180
tgtgcgtcgg agggcggcgg cggcggcggg ggtgtgnggt ccn 223

<210> 406
<211> 104
<212> DNA
<213> Homo sapiens

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<220>
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<220>
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<222> (81)
<223> n equals a,t,g, or c

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<222> (93)
<223> n equals a,t,g, or c

<220>
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<222> (103)
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<400> 406

cccacgcntc cgccgacagc agcagcctca ccatgangtt gctgatggtc ctcattgctgg 60
cggccctctc ccagcactgc nacgcaggct ctngctgccc ctna 104

<210> 407

<211> 66

<212> DNA

<213> Homo sapiens

<220>

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<222> (17)

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<220>

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<221> misc feature

<222> (57)

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<220>

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<222> (66)

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<400> 407

gccctatagt gagtctngta ncaattcact ggccgctcgtt ttacaacgtc gtgacgngga 60
aaactn 66

<210> 408

<211> 278

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (6)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (19)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (252)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (275)
<223> n equals a,t,g, or c

<400> 408
gggcanagca agctcctgna cctcaagtga tccacatgcc ttggttgacc aaattgctgg 60
gattacaggc atgagccaat atgaccagct caaacatctt ctttttaa at gtcagaagca 120
tgtatagtga ttatttctta ttttttcccc cttgatccat ctcaccagat gtttggtgat 180
tttataagaa ttttcaaact accagcttct ggctttgttg aacttgggat ttctgtttca 240
ctaattttct tntcctgtgc ttgtacttac tttgntgg 278

<210> 409
<211> 168
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (16)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (38)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (127)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (140)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (143)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (145)
<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (167)

<223> n equals a,t,g, or c

<400> 409

```
aataaaactc taaaangatc actataaaaa aagcaggnac gcctgcaggt accggtccgg 60
aattcccggg tcgaccacg cgtccgacgg ctgcgagaag acgacagaag ggcacggctg 120
cgagaanacg acagaagggn gcnantgaaa gaaggcggca gaaaggnt 168
```

<210> 410

<211> 415

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (307)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (347)

<223> n equals a,t,g, or c

<400> 410

```
tgaataccta agatttctgt cttgggggttt ttggtgcatg cagttgatta cttcttattt 60
ttcttaccaa ttgtgaatgt tgggtgtgaaa caattaatga agcttttgaa tcatccctat 120
tctgtgtttt atctagtcac ataaatggat taattactaa tttcagttga gaccttctaa 180
ttggttttta ctgaaacatt gaggggaacac aaatttatgg gcttcctgat gatgattctt 240
ctaggcatca tgcctatag tttgtcatcc ctgatgaatg taaaattaca ctgttcacaa 300
aggtttngtc tcctttccac tgctattaat catgggtcact ctccccnaaa tattatattt 360
tttctattaa aagaaaaaaa tggaaaaaaa ttacaaggca atggaaacta ttata 415
```

<210> 411

<211> 636

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (383)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (512)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (519)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (544)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (547)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (583)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (599)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (603)

<223> n equals a,t,g, or c

<400> 411

```
gcagatcaga cgtggcgacc cgctgaattt aagcatatta gtcagcggag gagaagaaac 60
taaccaggat tccctcagta acggcgagtg aacagggaag agcccagcgc cgaatccccg 120
ccccgcggcg gggcgcgagg catgtggcgt acggaagacc cgctccccgg cgccgctcgt 180
ggggggccca agtccttctg atcgaggccc agcccgtgga cgggtgtgagg ccggtagcgg 240
cccccggcgc gccggggcccg ggtcttcccg gagtcgggtt gcttggggaat gcagcccaaa 300
gcgggttggt aactccatct aaggctaaat ccccttgtaa atttaactgt tagtccaaag 360
aggaacagct ctttgacac tangaaaaaa ccttgtagag agagtaaaaa atttaacacc 420
catagtaggc ctaaaagcag ccaccaatta agaaagcgtt caagctcaac acccactacc 480
taaaaaatcc caaacatata actgaactcc tnacaccna ttggaccaat ctatcaccct 540
atanaanaac taatgtagt ataagtaaca tgaaaacatt ctnttcgca taagcctgng 600
tanattaaaa cacttgaact gaccattaac aggcca 636
```

<210> 412

<211> 182

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (129)

<223> n equals a,t,g, or c

<220>

<221> misc feature
<222> (166)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (169)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (170)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (172)
<223> n equals a,t,g, or c

<400> 412
ccattgattt ttatcaatag tcgtattcat acggatagtc ctggtattgt tccatcacat 60
tctgaggatg ctcttcgaac tcttcaaatt cttcttccat atatcacctt aaatagtgga 120
ttgcggtant aaagattgtg cctgtctttt aaccacatca ggctcngann gntctcgtga 180
ac 182

<210> 413
<211> 387
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (157)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (253)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (317)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (323)
<223> n equals a,t,g, or c

<220>

<221> misc feature
<222> (349)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (351)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (364)
<223> n equals a,t,g, or c

<400> 413
tcgacccacg cgtccgccc cgcgtccgcc aagaccaccc tcctttcatt tgctagaagg 60
actcactaga ctcaggaaag ctgttaggct cacagttaca gtttattaca gtaaaaggac 120
agagattaag atcagcaaag ggaggagggtg cacagcnacg ttccacgaca gatgaggcga 180
cggcttccat ctgccctctc ccagtggagc catataggca gcacctgatt ctcacagcaa 240
catgtgacaa canccaagaa gtactgcca tactgccaac cagagcagct tcaactcgag 300
atctttgtgt tccaganttt ttngtttgtc ttggagacag ggtctgggnc ngtttgggca 360
gacnaagagt acatggtgga gattcac 387

<210> 414
<211> 276
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (60)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (186)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (195)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (237)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (260)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (266)

<223> n equals a,t,g, or c

<400> 414

```
gcaaaggtcc atactgggta cttgggttca ttgccaccac ttagtgatg ttcagtttan 60
aaccattttg tctgctccct ctggaagcct tgcgcatagc ttactttgta attgttgag 120
aataactgct gaatttttag ctgttttgag ttgattcgca ccactgcacc acaactcact 180
atgaanacta ttancttat ttattatctt gtgaaaagta taccatgaaa attttgntca 240
tactgtattt atcaagtatn attaanagca ctagat 276
```

<210> 415

<211> 192

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (78)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (88)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (99)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (145)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (150)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (164)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (168)

<223> n equals a,t,g, or c

<400> 415

```
aaaagattgg actaagacac tggccatacc actggacagg gttatgttaa cacctgaaat 60
tgctgggtct tgagagancc caacgcantt ctgggagang gaccacattg gggggtaggt 120
ccacgggctt ggtgatagaa ttatntctcn atcgacttct tgantgcnat atgaactgta 180
acatttgctt ag                                     192
```

<210> 416

<211> 439

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (7)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (9)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (64)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (406)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (417)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (421)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (431)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (434)

<223> n equals a,t,g, or c

<400> 416

```
gcgagantnc gacagaaggg tacggctgcg agagacgaca gaaggggtacg gctgcgagaa 60
gacnacagaa ggggtacggct gcgagaagac gacagaaggg tacggctgcg agaagacgac 120
agaaggggtac ggctgcgaga agacgacaga aggtacggct gcgagaagac gacagaagga 180
tacggctgcg agaagacgac agaaggggaga atcttagttc aactttaaat ttgcccacag 240
aaccctctaa atccccctgt aaattttaact gttagtccaa agaggaacag ctctttggac 300
actaggaaaa aacctttagtag agagagtaaa aaattttaaca cccatagtag gcctaaaagc 360
agccaccaat taagaaagcg ttcaaagctc aacacccact acccanaaaa taaaaanaaa 420
naaaaacccg nggnccgct                                     439
```

<210> 417

<211> 155

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (9)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (84)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (122)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (123)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (143)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (153)

<223> n equals a,t,g, or c

<400> 417

```
gacatcttnt tggtttttat tttgaaacaa ttttaggct tgttccgggg gtctctgtgc 60
tgcctgtact gtattgacct gttntatagg tgccttttta ttaaaaagaa aattcaaaaa 120
```

annaaaaaaaa aaattaataa aaaaaaaaaa aanca

155

<210> 418

<211> 291

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (285)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (286)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (288)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (289)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (291)

<223> n equals a,t,g, or c

<400> 418

gaaaaaagaa atccatatct taaagaaaca gctttcaagt gcctttctgc agtttttcag 60
gagcgcaaga tagatttgga ataggaataa gctctagttc ttaacaaccg acactcctac 120
aagatttaga aaaaagttta caacataatc tagtttacag aaaaatcttg tgctagaata 180
ctttttaaaa ggtattttga ataccattaa aactgctttt tttttccag caagtatcca 240
accaacttgg ttctgcttca ataaatcttt ggaaaaacta atttnnanna n 291

<210> 419

<211> 340

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (2)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

367

<222> (315)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 419

| | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Xaa | Asp | Trp | Phe | Leu | Trp | Tyr | Val | Lys | Lys | Cys | Gly | Gly | Thr | Thr | 1 | 5 | 10 | 15 |
| Arg | Ile | Ile | Ser | Thr | Thr | Asn | Gly | Gly | Gln | Glu | Arg | Lys | Phe | Val | Gly | 20 | 25 | 30 | |
| Gly | Ser | Gly | Gln | Val | Ser | Glu | Arg | Ile | Met | Asp | Leu | Leu | Gly | Asp | Arg | 35 | 40 | 45 | |
| Val | Lys | Leu | Glu | Arg | Pro | Val | Ile | Tyr | Ile | Asp | Gln | Thr | Arg | Glu | Asn | 50 | 55 | 60 | |
| Val | Leu | Val | Glu | Thr | Leu | Asn | His | Glu | Met | Tyr | Glu | Ala | Lys | Tyr | Val | 65 | 70 | 75 | 80 |
| Ile | Ser | Ala | Ile | Pro | Pro | Thr | Leu | Gly | Met | Lys | Ile | His | Phe | Asn | Pro | 85 | 90 | 95 | |
| Pro | Leu | Pro | Met | Met | Arg | Asn | Gln | Met | Ile | Thr | Arg | Val | Pro | Leu | Gly | 100 | 105 | 110 | |
| Ser | Val | Ile | Lys | Cys | Ile | Val | Tyr | Tyr | Lys | Glu | Pro | Phe | Trp | Arg | Lys | 115 | 120 | 125 | |
| Lys | Asp | Tyr | Cys | Gly | Thr | Met | Ile | Ile | Asp | Gly | Glu | Glu | Ala | Pro | Val | 130 | 135 | 140 | |
| Ala | Tyr | Thr | Leu | Asp | Asp | Thr | Lys | Pro | Glu | Gly | Asn | Tyr | Ala | Ala | Ile | 145 | 150 | 155 | 160 |
| Met | Gly | Phe | Ile | Leu | Ala | His | Lys | Ala | Arg | Lys | Leu | Ala | Arg | Leu | Thr | 165 | 170 | 175 | |
| Lys | Glu | Glu | Arg | Leu | Lys | Lys | Leu | Cys | Glu | Leu | Tyr | Ala | Lys | Val | Leu | 180 | 185 | 190 | |
| Gly | Ser | Leu | Glu | Ala | Leu | Glu | Pro | Val | His | Tyr | Glu | Glu | Lys | Asn | Trp | 195 | 200 | 205 | |
| Cys | Glu | Glu | Gln | Tyr | Ser | Gly | Gly | Cys | Tyr | Thr | Thr | Tyr | Phe | Pro | Pro | 210 | 215 | 220 | |
| Gly | Ile | Leu | Thr | Gln | Tyr | Gly | Arg | Val | Leu | Arg | Gln | Pro | Val | Asp | Arg | 225 | 230 | 235 | 240 |
| Ile | Tyr | Phe | Ala | Gly | Thr | Glu | Thr | Ala | Thr | His | Trp | Ser | Gly | Tyr | Met | 245 | 250 | 255 | |

368

Glu Gly Ala Val Glu Ala Gly Glu Arg Ala Ala Arg Glu Ile Leu His
 260 265 270
 Ala Met Gly Lys Ile Pro Glu Asp Glu Ile Trp Gln Ser Glu Pro Glu
 275 280 285
 Ser Val Asp Val Pro Ala Gln Pro Ile Thr Thr Thr Phe Leu Glu Arg
 290 295 300
 His Leu Pro Ser Val Pro Gly Leu Leu Arg Xaa Ile Gly Leu Thr Thr
 305 310 315 320
 Ile Phe Ser Ala Thr Ala Leu Gly Phe Leu Ala His Lys Arg Gly Leu
 325 330 335
 Leu Val Arg Val
 340

<210> 420
 <211> 111
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (48)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 420
 Thr Arg Asp Leu Val Ser Phe Ile Ser Gly Ile Arg Leu Tyr Asn Leu
 1 5 10 15
 Met Leu Ser Val Leu Arg His Lys Arg Gln Asn Val Ala Tyr Phe Arg
 20 25 30
 Ile Cys Phe Phe Ile Glu Val Ser Gly Ile Leu Ser Lys Ile Val Xaa
 35 40 45
 Ser Arg His Cys Ser Leu Cys Ser Ser Gly Thr Ser Cys Pro Leu Leu
 50 55 60
 Ser Leu Gln Ala Thr Gly Asn Ala Ser Val Leu Val Ser Trp Arg Lys
 65 70 75 80
 Ile Thr Trp Gly Glu Gly Thr Ser Cys Gly Lys Ser Lys Cys Arg Tyr
 85 90 95
 Glu Met Arg Arg Leu Pro Gln Leu Lys Val Asp Lys Ser Ala Leu

369

100

105

110

<210> 421

<211> 61

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 421

Xaa Ile Trp Cys Ile Ile Cys Lys Glu Ser Lys Met Met Ser Phe Pro
 1 5 10 15

Arg Gly Met Asn Leu Arg Asn Ala Phe Asp Gly Asp Val Ser Val Thr
 20 25 30

Leu Cys Tyr Ser Gly Ser Ser Asn Asn Ser Lys Ala Asn Tyr Ser Lys
 35 40 45

Cys Lys Ile Phe Leu Phe Pro Arg Phe Thr Phe Val Trp
 50 55 60

<210> 422

<211> 51

<212> PRT

<213> Homo sapiens

<400> 422

Thr His Ala Tyr Cys Ser Asn Leu Ser Phe Arg Leu Tyr Asp Gln Trp
 1 5 10 15

Arg Ala Trp Met Gln Lys Ser His Lys Thr Arg Asn Gln His Arg Thr
 20 25 30

Arg Gly Ser Cys Pro Arg Ala Asp Gly Ala Arg Arg Glu Val Leu Pro
 35 40 45

Asp Lys Leu
 50

<210> 423

<211> 246

370

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (71)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (101)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (117)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (147)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 423

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Arg | Asn | Asp | Met | Lys | Ala | Asp | Cys | Ile | Leu | Tyr | Tyr | Gly | Phe | Gly |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asp | Ile | Phe | Arg | Ile | Ser | Ser | Met | Val | Val | Met | Glu | Asn | Val | Gly | Gln |
| | | | 20 | | | | | 25 | | | | | 30 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gln | Lys | Leu | Tyr | Glu | Met | Val | Ser | Tyr | Cys | Gln | Asn | Ile | Ser | Lys | Cys |
| | 35 | | | | | | 40 | | | | | 45 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Arg | Val | Leu | Met | Ala | Gln | His | Phe | Asp | Glu | Val | Trp | Asn | Ser | Glu |
| | 50 | | | | | 55 | | | | | 60 | | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Cys | Asn | Lys | Met | Cys | Xaa | Asn | Cys | Cys | Lys | Asp | Ser | Ala | Phe | Glu |
| 65 | | | | 70 | | | | | | 75 | | | | | 80 |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Lys | Asn | Ile | Thr | Glu | Tyr | Cys | Arg | Asp | Leu | Ile | Lys | Ile | Leu | Lys |
| | | | | 85 | | | | | 90 | | | | | 95 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gln | Ala | Glu | Gly | Xaa | Gly | Met | Glu | Lys | Leu | Thr | Pro | Ile | Gly | Asn | Trp |
| | | 100 | | | | | | 105 | | | | | 110 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Asp | Ser | Trp | Xaa | Gly | Lys | Gly | Ala | Ala | Lys | Leu | Arg | Val | Ala | Gly |
| | | 115 | | | | | 120 | | | | | | 125 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Val | Ala | Pro | Thr | Leu | Pro | Arg | Glu | Asp | Leu | Glu | Lys | Ile | Ile | Ala |
| | | 130 | | | | | 135 | | | | | 140 | | | |

371

His Phe Xaa Ile Gln Gln Tyr Leu Lys Glu Asp Tyr Ser Phe Thr Ala
 145 150 155 160

Tyr Ala Thr Ile Ser Tyr Leu Lys Ile Gly Pro Lys Ala Asn Leu Leu
 165 170 175

Asn Asn Glu Ala His Ala Ile Thr Met Gln Val Thr Lys Ser Thr Gln
 180 185 190

Asn Ser Phe Arg Ala Glu Ser Ser Gln Thr Cys His Ser Glu Gln Gly
 195 200 205

Asp Lys Lys Met Glu Glu Lys Asn Ser Gly Asn Phe Gln Lys Lys Ala
 210 215 220

Ala Asn Met Leu Gln Gln Ser Gly Ser Lys Asn Thr Gly Ala Lys Lys
 225 230 235 240

Arg Lys Ile Asp Asp Ala
 245

<210> 424

<211> 109

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (77)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 424

Asp His Trp Pro Arg Pro Glu Trp Leu Pro Cys Thr Ser Trp Arg Arg
 1 5 10 15

Ala Ser Cys Leu Asn His Val Asn Cys His His Leu Ala Thr Pro Ala
 20 25 30

Pro Ala Ser Ala Leu Pro Pro Phe Pro Pro Ser Trp Ser Gly Gly Tyr
 35 40 45

Arg Ser Leu Gly Pro Thr Leu Ala Pro Leu Ser Pro Ala Ser Val Cys
 50 55 60

Leu Thr Val Phe Pro Pro Leu Pro Gln Leu Arg Cys Xaa Pro Gln Ala
 65 70 75 80

Trp Cys Cys Leu Gly Gly Leu Gly Glu Gly Val Cys Gly Gly Gly Arg
 85 90 95

372

Arg Val Lys Thr Glu Ala Arg Cys Gln Asn Gly Leu Glu
 100 105

<210> 425
 <211> 57
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (5)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (49)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 425
 Gly Ser Glu Thr Xaa Lys Tyr Leu Val Glu Asp Lys Arg Leu Gly Leu
 1 5 10 15

Tyr Thr Trp Leu Cys Thr Asp Leu Leu Ser His Ile Gly Asn His His
 20 25 30

Thr Leu Gln Gly Ile Ser Phe Ile Cys Lys Met Gln Arg Leu Val Leu
 35 40 45

Xaa Asn His Thr Asn Phe Phe Val Leu
 50 55

<210> 426
 <211> 99
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (96)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 426
 Phe Gly Thr Ser Gly Asp Gly Gly Gly Ser Lys Met Ala Gln Ala Ile
 1 5 10 15

Phe Glu Ala Leu Glu Gly Met Asp Asn Gln Thr Val Leu Ala Val Gln

373

20 25 30
 Ser Leu Leu Asp Gly Gln Gly Ala Val Pro Asp Pro Thr Gly Gln Ser
 35 40 45
 Val Asn Ala Pro Pro Ala Ile Gln Pro Leu Asp Asp Glu Asp Val Phe
 50 55 60
 Leu Cys Gly Lys Cys Lys Lys Gln Phe Asn Ser Leu Pro Ala Phe Met
 65 70 75 80
 Thr His Lys Arg Glu Gln Cys Gln Gly Asn Ala Pro Ala Leu Ala Xaa
 85 90 95
 Val Ser Leu

<210> 427
 <211> 55
 <212> PRT
 <213> Homo sapiens

<400> 427
 Asn Ser Asn Ser Ser Ile Phe Ser Leu Val Ser Val Lys Cys Asp Lys
 1 5 10 15
 Ser Thr Tyr Phe Lys Leu Phe Ser Ala Leu Gly Tyr Ser Ser Asn Lys
 20 25 30
 Asn Thr Asn Leu Trp Val Phe Lys Lys Thr Trp Arg Ile Asn Ser Tyr
 35 40 45
 Phe Lys Arg Ser Lys Lys Lys
 50 55

<210> 428
 <211> 54
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (41)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 428
 His Thr Leu Ser Asn Leu Glu Phe Ala Gln Lys Val Glu Pro Cys Asn

374

1 5 10 15
Asp His Val Arg Ala Lys Leu Ser Trp Ala Lys Lys Arg Asp Glu Asp
20 25 30
Asp Val Pro Thr Val Pro Ser Thr Xaa Gly Glu Glu Arg Leu Tyr Asn
35 40 45
Pro Phe Leu Arg Val Ala
50

<210> 429
<211> 39
<212> PRT
<213> Homo sapiens

<400> 429
Arg Gln Thr Lys Val Asn Leu Lys Glu Thr Arg Ser Phe Glu Ile Ile
1 5 10 15
Val Trp Gly Phe Tyr Lys Ser Asn Tyr Cys His Leu His Pro Asp Ser
20 25 30
Phe Lys Leu Leu Ile His Pro
35

<210> 430
<211> 133
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (81)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (85)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 430
Ala Arg Ala Pro Arg Val Pro Pro Ala Pro His Thr Pro Ser Lys Met
1 5 10 15
Gly Lys Glu Lys Thr His Ile Asn Ile Val Val Ile Gly His Val Asp
20 25 30

| | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| Ser | Gly | Lys | Ser | Thr | Thr | Thr | Gly | His | Leu | Ile | Tyr | Lys | Cys | Gly | Gly | |
| 35 | | | | | | 40 | | | | | | 45 | | | | |
| Ile | Asp | Lys | Arg | Thr | Ile | Glu | Lys | Phe | Glu | Lys | Glu | Ala | Ala | Glu | Met | |
| 50 | | | | | | 55 | | | | | | 60 | | | | |
| Gly | Lys | Gly | Ser | Phe | Lys | Tyr | Ala | Trp | Val | Leu | Asp | Lys | Leu | Lys | Ala | |
| 65 | | | | | | 70 | | | | | | 75 | | | 80 | |
| Xaa | Val | Ser | Ala | Xaa | Ile | Thr | Ile | Asp | Ile | Ser | Leu | Trp | Lys | Phe | Glu | |
| | | | 85 | | | | | | 90 | | | | | | 95 | |
| Thr | Thr | Lys | Tyr | Tyr | Ile | Thr | Ile | Ile | Asp | Ala | Pro | Gly | His | Arg | Asp | |
| | | | 100 | | | | | | 105 | | | | | | 110 | |
| Phe | Ile | Lys | Asn | Met | Ile | Thr | Gly | Thr | Ser | Gln | Ala | Asp | Cys | Ala | Val | |
| 115 | | | | | | 120 | | | | | | 125 | | | | |
| Leu | Ile | Val | Ala | Ala | | | | | | | | | | | | |
| 130 | | | | | | | | | | | | | | | | |

```
<210> 431
<211> 190
<212> PRT
<213> Homo sapiens
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<400> 431
Leu Cys Trp Ala Arg Pro Leu Pro Ser Gly Pro Val Leu Leu Ala Ala
  1                      5                      10                      15

Asn Lys Asp Ser Ser Trp Cys Pro Thr Cys Leu Val His Cys Cys Val
      20                      25                      30

Asn Pro Gly Gly Ser Gly His Arg Arg Gln Pro Arg Pro Arg Val Gln
      35                      40                      45

Glu Lys Cys Ser Leu Glu Ala Arg Thr Thr Ala Ser His Trp Gly Arg
      50                      55                      60

Arg Gly Pro Arg Thr Thr Ser Ala Ser Tyr Leu Pro Ala Ser Ala Arg
      65                      70                      75                      80

Gly Pro Arg Asp Ala Val Leu Phe Gln Pro Pro Ala Leu Gly Arg Gly
      85                      90                      95

His Ala Ser Arg Ile Gln Gly Ala Gly Gly Leu Ser Thr Ala Arg Thr
      100                      105                      110

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376

Cys Leu Leu Ala Ala Ala Ala Val Gly Glu His Gly Gly Cys Gln Arg
 115 120 125
 Leu Leu Trp Lys Val Ala Ala Ser Glu Met Ala Gly Ala Ala Gly Val
 130 135 140
 Arg Leu His Thr Ala Gln Val Ser Ser Gly Arg Leu Ser Trp Gly Gly
 145 150 155 160
 Ser Ser Ser Ala Glu Gly Trp Trp Gly Val Gln Ser Val Ile Leu Gly
 165 170 175
 Ala Val Cys Pro Thr Pro Ala Trp Gly Pro His Phe Arg Arg
 180 185 190

<210> 432

<211> 310

<212> PRT

<213> Homo sapiens

<400> 432

Gly Pro His Gly Asn Gly Glu Val Arg Trp Pro Leu Pro Pro Pro Pro
 1 5 10 15
 Pro Arg Phe Val Ala Arg Arg Lys Met Ala Asp Leu Glu Glu Gln Leu
 20 25 30
 Ser Asp Glu Glu Lys Val Arg Ile Ala Ala Lys Phe Ile Ile His Ala
 35 40 45
 Pro Pro Gly Glu Phe Asn Glu Val Phe Asn Asp Val Arg Leu Leu Leu
 50 55 60
 Asn Asn Asp Asn Leu Leu Arg Glu Gly Ala Ala His Ala Phe Ala Gln
 65 70 75 80
 Tyr Asn Leu Asp Gln Phe Thr Pro Val Lys Ile Glu Gly Tyr Glu Asp
 85 90 95
 Gln Val Leu Ile Thr Glu His Gly Asp Leu Gly Asn Gly Lys Phe Leu
 100 105 110
 Asp Pro Lys Asn Arg Ile Cys Phe Lys Phe Asp His Leu Arg Lys Glu
 115 120 125
 Ala Thr Asp Pro Arg Pro Cys Glu Val Glu Asn Ala Val Glu Ser Trp
 130 135 140
 Arg Thr Ser Val Glu Thr Ala Leu Arg Ala Tyr Val Lys Glu His Tyr

377

145 150 155 160
 Pro Asn Gly Val Cys Thr Val Tyr Gly Lys Lys Ile Asp Gly Gln Gln
 165 170 175
 Thr Ile Ile Ala Cys Ile Glu Ser His Gln Phe Gln Ala Lys Asn Phe
 180 185 190
 Trp Asn Gly Arg Trp Arg Ser Glu Trp Lys Phe Thr Ile Thr Pro Ser
 195 200 205
 Thr Thr Gln Val Val Gly Ile Leu Lys Ile Gln Val His Tyr Tyr Glu
 210 215 220
 Asp Gly Asn Val Gln Leu Val Ser His Lys Asp Ile Gln Asp Ser Leu
 225 230 235 240
 Thr Val Ser Asn Glu Val Gln Thr Ala Lys Glu Phe Ile Lys Ile Val
 245 250 255
 Glu Ala Ala Glu Asn Glu Tyr Gln Thr Ala Ile Ser Glu Asn Tyr Gln
 260 265 270
 Thr Met Ser Asp Thr Thr Phe Lys Ala Leu Arg Arg Gln Leu Pro Val
 275 280 285
 Thr Arg Thr Lys Ile Asp Trp Asn Lys Ile Leu Ser Tyr Lys Ile Gly
 290 295 300
 Lys Glu Met Gln Asn Ala
 305 310

<210> 433

<211> 289

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (287)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (288)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 433

Gln Ser Cys Thr Ser Gly Ser Ser Lys Pro Asn Ser Pro Ser Ile Ser

378

| | | | |
|---|-----|-----|-----|
| 1 | 5 | 10 | 15 |
| Pro Ser Ile Leu Ser Asn Thr Glu His Lys Arg Gly Pro Glu Val Thr | 20 | 25 | 30 |
| Ser Gln Gly Val Gln Thr Ser Ser Pro Ala Cys Lys Gln Glu Lys Asp | 35 | 40 | 45 |
| Asp Lys Glu Glu Lys Lys Asp Ala Ala Glu Gln Val Arg Lys Ser Thr | 50 | 55 | 60 |
| Leu Asn Pro Asn Ala Lys Glu Phe Asn Pro Arg Ser Phe Ser Gln Pro | 65 | 70 | 75 |
| Lys Pro Ser Thr Thr Pro Thr Ser Pro Arg Pro Gln Ala Gln Pro Ser | 85 | 90 | 95 |
| Pro Ser Met Val Gly His Gln Gln Pro Thr Pro Val Tyr Thr Gln Pro | 100 | 105 | 110 |
| Val Cys Phe Ala Pro Asn Met Met Tyr Pro Val Pro Val Ser Pro Gly | 115 | 120 | 125 |
| Val Gln Pro Leu Tyr Pro Ile Pro Met Thr Pro Met Pro Val Asn Gln | 130 | 135 | 140 |
| Ala Lys Thr Tyr Arg Ala Gly Lys Val Pro Asn Met Pro Gln Gln Arg | 145 | 150 | 155 |
| Gln Asp Gln His His Gln Ser Ala Met Met His Pro Ala Ser Ala Ala | 165 | 170 | 175 |
| Gly Pro Pro Ile Ala Ala Thr Pro Pro Ala Tyr Ser Thr Gln Tyr Val | 180 | 185 | 190 |
| Ala Tyr Ser Pro Gln Gln Phe Pro Asn Gln Pro Leu Val Gln His Val | 195 | 200 | 205 |
| Pro His Tyr Gln Ser Gln His Pro His Val Tyr Ser Pro Val Ile Gln | 210 | 215 | 220 |
| Gly Asn Ala Arg Met Met Ala Pro Pro Thr His Ala Gln Pro Gly Leu | 225 | 230 | 235 |
| Val Ser Ser Ser Ala Thr Gln Tyr Gly Ala His Glu Gln Thr His Ala | 245 | 250 | 255 |
| Met Tyr Ala Cys Pro Lys Leu Pro Tyr Asn Lys Glu Thr Ser Pro Ser | 260 | 265 | 270 |
| Phe Tyr Phe Ala Ile Ser Thr Gly Ser Leu Ala Gln Gln Tyr Xaa Xaa | | | |

379

275

280

285

Pro

<210> 434

<211> 147

<212> PRT

<213> Homo sapiens

<400> 434

Lys Val Thr Pro Asp Leu Lys Pro Thr Glu Ala Ser Ser Ser Ala Phe
 1 5 10 15

Arg Leu Met Pro Ala Leu Gly Val Ser Val Ala Asp Gln Lys Gly Lys
 20 25 30

Ser Thr Val Ala Ser Ser Glu Ala Lys Pro Ala Ala Thr Ile Arg Ile
 35 40 45

Val Gln Gly Leu Gly Val Met Pro Pro Lys Ala Gly Gln Thr Ile Thr
 50 55 60

Val Ala Thr His Ala Lys Gln Gly Ala Ser Val Ala Ser Gly Ser Gly
 65 70 75 80

Thr Val His Thr Ser Ala Val Ser Leu Pro Ser Met Asn Ala Ala Val
 85 90 95

Ser Lys Thr Val Ala Val Ala Ser Gly Ala Ala Arg Pro Pro Ser Ala
 100 105 110

Ser Ala Gln Glu Pro Pro Pro Cys Gly Arg Ser Leu Ser Ala Pro Arg
 115 120 125

Leu Cys Pro Arg Pro Arg Leu Gly Ser Cys Leu His Gly Ser Gln Phe
 130 135 140

Pro Ser Leu
 145

<210> 435

<211> 151

<212> PRT

<213> Homo sapiens

<220>

380

<221> SITE

<222> (9)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (15)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (79)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 435

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Ser | Gly | Thr | Lys | Asp | Pro | Ser | Xaa | Cys | Asn | Thr | Gln | Thr | Xaa | Ala |
| 1 | | | | 5 | | | | 10 | | | | | | 15 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| His | Thr | His | Thr | Gly | Gly | Glu | Ile | Ser | Leu | Phe | Ser | Met | Ser | Phe | Phe |
| | | | 20 | | | | | 25 | | | | | 30 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Trp | Ala | Glu | Thr | Gly | Tyr | Cys | Pro | Gly | Gln | Leu | Pro | Glu | Lys | His |
| | | 35 | | | | | 40 | | | | | 45 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Arg | Glu | Leu | Arg | Ser | Ala | Arg | Pro | Ser | Ser | Leu | Ala | Pro | Gly | Phe |
| | | 50 | | | | 55 | | | | | 60 | | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Gly | Pro | Arg | Thr | Ala | Asp | Arg | Gly | Trp | Ser | Trp | Arg | Leu | Xaa | Ser |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Ala | Tyr | Thr | Trp | Arg | Asn | Ala | Pro | Pro | Ser | Ser | Pro | Ser | Leu | Gln |
| | | | | 85 | | | | | 90 | | | | | 95 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Trp | Gly | Trp | Leu | Gly | Pro | Glu | Gly | Cys | Asp | Glu | Glu | Lys | Arg | Ala |
| | | 100 | | | | | | 105 | | | | | 110 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Val | Gly | Met | Arg | Gln | Glu | Gly | Ile | Asp | Phe | Asp | Cys | Asp | Leu | Trp |
| | | 115 | | | | | 120 | | | | | 125 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Phe | Leu | Pro | Ala | Leu | Asp | Asn | Pro | Ala | Lys | Asp | Cys | Phe | Phe | Leu |
| | 130 | | | | | 135 | | | | | 140 | | | | |

| | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|
| Ser | Leu | Ala | Arg | Arg | Gly | Pro |
| 145 | | | | | 150 | |

<210> 436

<211> 180

<212> PRT

<213> Homo sapiens

381

<220>

<221> SITE

<222> (42)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (123)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 436

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Pro | Ala | Ser | Pro | Val | Met | Pro | Pro | Gln | Thr | Gln | Ser | Pro | Gly | Gln |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pro | Ala | Gln | Pro | Ala | Pro | Met | Val | Pro | Leu | His | Gln | Lys | Gln | Ser | Arg |
| | | 20 | | | | | | 25 | | | | | 30 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Thr | Pro | Ile | Gln | Lys | Pro | Arg | Gly | Xaa | Asp | Pro | Val | Glu | Ile | Leu |
| | | 35 | | | | | 40 | | | | | 45 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gln | Glu | Arg | Glu | Tyr | Arg | Leu | Gln | Ala | Arg | Ile | Ala | His | Arg | Ile | Gln |
| | 50 | | | | | 55 | | | | | 60 | | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Leu | Glu | Asn | Leu | Pro | Gly | Ser | Leu | Ala | Gly | Asp | Leu | Arg | Thr | Lys |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Thr | Ile | Glu | Leu | Lys | Ala | Leu | Arg | Leu | Leu | Asn | Phe | Gln | Arg | Gln |
| | | | | 85 | | | | | 90 | | | | | 95 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Arg | Gln | Glu | Val | Val | Val | Cys | Met | Arg | Arg | Asp | Thr | Ala | Leu | Glu |
| | | 100 | | | | | | 105 | | | | | | 110 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Ala | Leu | Asn | Ala | Lys | Ala | Tyr | Lys | Arg | Xaa | Ser | Ala | Ser | Pro | Cys |
| | | 115 | | | | | | 120 | | | | | 125 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Arg | Pro | Ala | Ser | Leu | Arg | Ser | Trp | Arg | Ser | Ser | Arg | Arg | Ser | Ser |
| | 130 | | | | | 135 | | | | | | 140 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Ser | Ala | Ser | Ala | Gly | Arg | Ser | Thr | Arg | Asn | Thr | Ser | Ile | Ala | Phe |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Ser | Met | Pro | Arg | Ile | Ser | Arg | Asn | Ile | Thr | Asp | Pro | Ser | Gln | Ala |
| | | | | 165 | | | | | 170 | | | | | 175 | |

| | | | |
|-----|-----|-----|-----|
| Lys | Ser | Arg | Ser |
| | | | 180 |

<210> 437

382

<211> 415
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (8)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (94)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (96)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (170)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 437
 Arg Lys Tyr Leu Val Pro Leu Xaa Lys Lys Leu Tyr Leu Lys Trp Ala
 1 5 10 15
 Leu Glu Glu Tyr Leu Asp Glu Phe Asp Pro Cys His Cys Arg Pro Cys
 20 25 30
 Gln Asn Gly Gly Leu Ala Thr Val Glu Gly Thr His Cys Leu Cys His
 35 40 45
 Cys Lys Pro Tyr Thr Phe Gly Ala Ala Cys Glu Gln Gly Val Leu Val
 50 55 60
 Gly Asn Gln Ala Gly Gly Val Asp Gly Gly Trp Ser Cys Trp Ser Ser
 65 70 75 80
 Trp Ser Pro Cys Val Gln Gly Lys Lys Thr Arg Ser Arg Xaa Cys Xaa
 85 90 95
 Asn Pro Pro Pro Ser Gly Gly Gly Arg Ser Cys Val Gly Glu Thr Thr
 100 105 110
 Glu Ser Thr Gln Cys Glu Asp Glu Glu Leu Glu His Leu Arg Leu Leu
 115 120 125
 Glu Pro His Cys Phe Pro Leu Ser Leu Val Pro Thr Glu Phe Cys Pro
 130 135 140

383

| | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Pro | Pro | Ala | Leu | Lys | Asp | Gly | Phe | Val | Gln | Asp | Glu | Gly | Thr | Met | 145 | 150 | 155 | 160 |
| Phe | Pro | Val | Gly | Lys | Asn | Val | Val | Tyr | Xaa | Cys | Asn | Glu | Gly | Tyr | Ser | 165 | 170 | 175 | |
| Leu | Ile | Gly | Asn | Pro | Val | Ala | Arg | Cys | Gly | Glu | Asp | Leu | Arg | Trp | Leu | 180 | 185 | 190 | |
| Val | Gly | Glu | Met | His | Cys | Gln | Lys | Ile | Ala | Cys | Val | Leu | Pro | Val | Leu | 195 | 200 | 205 | |
| Met | Asp | Gly | Ile | Gln | Ser | His | Pro | Gln | Lys | Pro | Phe | Tyr | Thr | Val | Gly | 210 | 215 | 220 | |
| Glu | Lys | Val | Thr | Val | Ser | Cys | Ser | Gly | Gly | Met | Ser | Leu | Glu | Gly | Pro | 225 | 230 | 235 | 240 |
| Ser | Ala | Phe | Leu | Cys | Gly | Ser | Ser | Leu | Lys | Trp | Ser | Pro | Glu | Met | Lys | 245 | 250 | 255 | |
| Asn | Ala | Arg | Cys | Val | Gln | Lys | Glu | Asn | Pro | Leu | Thr | Gln | Ala | Val | Pro | 260 | 265 | 270 | |
| Lys | Cys | Gln | Arg | Trp | Glu | Lys | Leu | Gln | Asn | Ser | Arg | Cys | Val | Cys | Lys | 275 | 280 | 285 | |
| Met | Pro | Tyr | Glu | Cys | Gly | Pro | Ser | Leu | Asp | Val | Cys | Ala | Gln | Asp | Glu | 290 | 295 | 300 | |
| Arg | Ser | Lys | Arg | Ile | Leu | Pro | Leu | Thr | Val | Cys | Lys | Met | His | Val | Leu | 305 | 310 | 315 | 320 |
| His | Cys | Gln | Gly | Arg | Asn | Tyr | Thr | Leu | Thr | Gly | Arg | Asp | Ser | Cys | Thr | 325 | 330 | 335 | |
| Leu | Pro | Ala | Ser | Ala | Glu | Lys | Ala | Cys | Gly | Ala | Cys | Pro | Leu | Trp | Gly | 340 | 345 | 350 | |
| Lys | Cys | Asp | Ala | Glu | Ser | Ser | Lys | Cys | Val | Cys | Arg | Glu | Ala | Ser | Glu | 355 | 360 | 365 | |
| Cys | Glu | Glu | Glu | Gly | Phe | Ser | Ile | Cys | Val | Glu | Val | Asn | Gly | Lys | Glu | 370 | 375 | 380 | |
| Gln | Thr | Met | Ser | Glu | Cys | Glu | Ala | Gly | Ala | Leu | Arg | Cys | Arg | Gly | Gln | 385 | 390 | 395 | 400 |
| Ser | Ile | Ser | Val | Thr | Ser | Ile | Arg | Pro | Cys | Ala | Ala | Glu | Thr | Gln | | 405 | 410 | 415 | |

<210> 438
 <211> 285
 <212> PRT
 <213> Homo sapiens

 <220>
 <221> SITE
 <222> (16)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <220>
 <221> SITE
 <222> (17)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <220>
 <221> SITE
 <222> (18)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <400> 438
 Leu Ile Arg Leu Thr Ile Gly Lys Ala Gly Ser Leu Gln Tyr Arg Xaa
 1 5 10 15

 Xaa Xaa Phe Pro Gly Met Glu Ala Phe Leu Gly Ser Arg Ser Gly Leu
 20 25 30

 Trp Ala Gly Gly Pro Ala Pro Gly Gln Phe Tyr Arg Ile Pro Ser Thr
 35 40 45

 Pro Asp Ser Phe Met Asp Pro Ala Ser Ala Leu Tyr Arg Gly Pro Ile
 50 55 60

 Thr Arg Thr Gln Asn Pro Met Val Thr Gly Thr Ser Val Leu Gly Val
 65 70 75 80

 Lys Phe Glu Gly Gly Val Val Ile Ala Ala Asp Met Leu Gly Ser Tyr
 85 90 95

 Gly Ser Leu Ala Arg Phe Arg Asn Ile Ser Arg Ile Met Arg Val Asn
 100 105 110

 Asn Ser Thr Met Leu Gly Ala Ser Gly Asp Tyr Ala Asp Phe Gln Tyr
 115 120 125

 Leu Lys Gln Val Leu Gly Gln Met Val Ile Asp Glu Glu Leu Leu Gly
 130 135 140

385

Asp Gly His Ser Tyr Ser Pro Arg Ala Ile His Ser Trp Leu Thr Arg
 145 150 155 160
 Ala Met Tyr Ser Arg Arg Ser Lys Met Asn Pro Leu Trp Asn Thr Met
 165 170 175
 Val Ile Gly Gly Tyr Ala Asp Gly Glu Ser Phe Leu Gly Tyr Val Asp
 180 185 190
 Met Leu Gly Val Ala Tyr Glu Ala Pro Ser Leu Ala Thr Gly Tyr Gly
 195 200 205
 Ala Tyr Leu Ala Gln Pro Leu Leu Arg Glu Val Leu Glu Lys Gln Pro
 210 215 220
 Val Leu Ser Gln Thr Glu Ala Arg Asp Leu Val Glu Arg Cys Met Arg
 225 230 235 240
 Val Leu Tyr Tyr Arg Asp Ala Arg Ser Tyr Asn Arg Phe Gln Ile Ala
 245 250 255
 Thr Val Thr Glu Lys Gly Val Glu Ile Glu Gly Pro Leu Ser Thr Glu
 260 265 270
 Thr Asn Trp Asp Ile Ala His Met Ile Ser Gly Phe Glu
 275 280 285

<210> 439

<211> 185

<212> PRT

<213> Homo sapiens

<400> 439

Asn Ser Ala Ala His Lys Lys Gly Lys Leu Pro Ile Val Asn Glu Asp
 1 5 10 15
 Asp Glu Leu Val Ala Ile Ile Ala Arg Thr Asp Leu Lys Lys Asn Arg
 20 25 30
 Asp Tyr Pro Leu Ala Ser Lys Asp Ala Lys Lys Gln Leu Leu Cys Gly
 35 40 45
 Ala Ala Ile Gly Thr His Glu Asp Asp Lys Tyr Arg Leu Asp Leu Leu
 50 55 60
 Ala Gln Ala Gly Val Asp Val Val Val Leu Asp Ser Ser Gln Gly Asn
 65 70 75 80
 Ser Ile Phe Gln Ile Asn Met Ile Lys Tyr Ile Lys Asp Lys Tyr Pro

386

| | | |
|---|-----|-----|
| 85 | 90 | 95 |
| Asn Leu Gln Val Ile Gly Gly Asn Val Val Thr Ala Ala Gln Ala Lys | | |
| 100 | 105 | 110 |
| Asn Leu Ile Asp Ala Gly Val Asp Ala Leu Arg Val Gly Met Gly Ser | | |
| 115 | 120 | 125 |
| Gly Ser Ile Cys Ile Thr Gln Glu Val Leu Ala Cys Gly Arg Pro Gln | | |
| 130 | 135 | 140 |
| Ala Thr Ala Val Tyr Lys Val Ser Glu Tyr Ala Arg Arg Phe Gly Val | | |
| 145 | 150 | 155 |
| | | 160 |
| Pro Val Ile Ala Asp Gly Gly Ile Gln Asn Val Gly His Ile Ala Lys | | |
| 165 | 170 | 175 |
| Ala Leu Ala Leu Gly Ala Pro Gln Ser | | |
| 180 | 185 | |

<210> 440

<211> 211

<212> PRT

<213> Homo sapiens

<400> 440

| | | |
|---|-----|-----|
| Leu Gln Gly Arg Ser Thr Pro Ile Trp Pro Ala Leu Ala Thr Val Thr | | |
| 1 | 5 | 10 |
| | | 15 |
| Ser Arg Thr Pro Ala Leu Gly Pro Gln Ala Gly Ile Asp Thr Asn Glu | | |
| 20 | 25 | 30 |
| Ile Ala Pro Leu Glu Pro Asp Ala Pro Pro Asp Ala Cys Glu Ala Ser | | |
| 35 | 40 | 45 |
| Phe Asp Ala Val Ser Thr Ile Arg Gly Glu Leu Phe Phe Phe Lys Ala | | |
| 50 | 55 | 60 |
| Gly Phe Val Trp Arg Leu Arg Gly Gly Gln Leu Gln Pro Gly Tyr Pro | | |
| 65 | 70 | 75 |
| | | 80 |
| Ala Leu Ala Ser Arg His Trp Gln Gly Leu Pro Ser Pro Val Asp Ala | | |
| 85 | 90 | 95 |
| Ala Phe Glu Asp Ala Gln Gly His Ile Trp Phe Phe Gln Gly Ala Gln | | |
| 100 | 105 | 110 |
| Tyr Trp Val Tyr Asp Gly Glu Lys Pro Val Leu Gly Pro Ala Pro Leu | | |
| 115 | 120 | 125 |

387

Thr Glu Leu Gly Leu Val Arg Phe Pro Val His Ala Ala Leu Val Trp
 130 135 140

Gly Pro Glu Lys Asn Lys Ile Tyr Phe Phe Arg Gly Arg Asp Tyr Trp
 145 150 155 160

Arg Phe His Pro Ser Thr Arg Arg Val Asp Ser Pro Val Pro Arg Arg
 165 170 175

Pro Leu Thr Gly Glu Gly Cys Pro Leu Arg Ser Thr Leu Pro Ser Arg
 180 185 190

Met Leu Met Ala Met Pro Thr Ser Cys Ala Ala Ala Ser Thr Gly Ser
 195 200 205

Leu Thr Leu
 210

<210> 441

<211> 80

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (40)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 441

Gly Gly Ala Gly Lys Leu Leu Ser Phe Thr His Ser Ala Pro Trp Ser
 1 5 10 15

Arg Leu Trp Ser Ser Leu Gly Lys Arg Val Thr Gly Glu Ser Gln Gly
 20 25 30

Leu Glu Lys Leu Pro Gly Thr Xaa Asp Gly Leu Ala Ala Leu Thr Gln
 35 40 45

Asp Pro Leu Pro Leu Pro Pro Leu Cys Arg Asn Thr Gly Thr Pro
 50 55 60

Arg Gly Lys Met Ser Phe Ser Arg Leu Gln Phe Ser Pro Arg Lys Leu
 65 70 75 80

388

<210> 442
<211> 567
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (205)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (212)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (469)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (503)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (505)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (517)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (535)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (546)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 442
Asn Val His Leu Tyr Ile Met Tyr Tyr Met Glu Ala Lys His Ala Val
1 5 10 15

Ser Phe Met Thr Cys Thr Gln Asn Val Ala Pro Asp Met Phe Arg Thr

389

| | | |
|---|-------------------------------------|-----|
| 20 | 25 | 30 |
| Ile Pro Pro Glu Ala Asn Ile | Pro Ile Pro Val Lys Ser Asp Met Val | |
| 35 | 40 | 45 |
| Met Met His Glu His His Lys Glu Thr Glu Tyr Lys Asp Lys Ile Pro | | |
| 50 | 55 | 60 |
| Leu Leu Gln Gln Pro Lys Arg Glu Glu Glu Glu Val Leu Asp Gln Gly | | |
| 65 | 70 | 75 |
| Asp Phe Tyr Ser Leu Leu Ser Lys Leu Leu Gly Glu Arg Glu Asp Val | | |
| 85 | 90 | 95 |
| Val His Val His Lys Tyr Asn Pro Thr Glu Lys Ala Glu Ser Glu Ser | | |
| 100 | 105 | 110 |
| Asp Leu Val Ala Glu Ile Ala Asn Val Val Gln Lys Lys Asp Leu Gly | | |
| 115 | 120 | 125 |
| Arg Ser Asp Ala Arg Glu Gly Ala Glu His Glu Arg Gly Asn Ala Ile | | |
| 130 | 135 | 140 |
| Leu Val Arg Asp Arg Ile His Lys Phe His Arg Leu Val Ser Thr Leu | | |
| 145 | 150 | 155 |
| Arg Pro Pro Glu Ser Arg Val Phe Ser Leu Gln Gln Pro Pro Pro Gly | | |
| 165 | 170 | 175 |
| Glu Gly Thr Trp Glu Pro Glu His Thr Gly Asp Phe His Met Glu Glu | | |
| 180 | 185 | 190 |
| Ala Leu Asp Trp Pro Gly Val Tyr Leu Leu Pro Gly Xaa Val Ser Gly | | |
| 195 | 200 | 205 |
| Val Ala Leu Xaa Pro Lys Asn Asn Leu Val Ile Phe His Arg Gly Asp | | |
| 210 | 215 | 220 |
| His Val Trp Asp Gly Asn Ser Phe Asp Ser Lys Phe Val Tyr Gln Gln | | |
| 225 | 230 | 235 |
| Ile Gly Leu Gly Pro Ile Glu Glu Asp Thr Ile Leu Val Ile Asp Pro | | |
| 245 | 250 | 255 |
| Asn Asn Ala Ala Val Leu Gln Ser Ser Gly Lys Asn Leu Phe Tyr Leu | | |
| 260 | 265 | 270 |
| Pro His Gly Leu Ser Ile Asp Lys Asp Gly Asn Tyr Trp Val Thr Asp | | |
| 275 | 280 | 285 |
| Val Ala Leu His Gln Val Phe Lys Leu Asp Pro Asn Asn Lys Glu Gly | | |

390

| | | |
|---|-----|---------|
| 290 | 295 | 300 |
| Pro Val Leu Ile Leu Gly Arg Ser Met Gln Pro Gly Ser Asp Gln Asn | | |
| 305 | 310 | 315 320 |
| His Phe Cys Gln Pro Thr Asp Val Ala Val Asp Pro Gly Thr Gly Ala | | |
| | 325 | 330 335 |
| Ile Tyr Val Ser Asp Gly Tyr Cys Asn Ser Arg Ile Val Gln Phe Ser | | |
| | 340 | 345 350 |
| Pro Ser Gly Lys Phe Ile Thr Gln Trp Gly Glu Glu Ser Ser Gly Ser | | |
| | 355 | 360 365 |
| Ser Pro Leu Pro Gly Gln Phe Thr Val Pro His Ser Leu Ala Leu Val | | |
| | 370 | 375 380 |
| Pro Leu Leu Gly Gln Leu Cys Val Ala Asp Arg Glu Asn Gly Arg Ile | | |
| 385 | 390 | 395 400 |
| Gln Cys Phe Lys Thr Asp Thr Lys Glu Phe Val Arg Glu Ile Lys His | | |
| | 405 | 410 415 |
| Ser Ser Phe Gly Arg Asn Val Phe Ala Ile Ser Tyr Ile Pro Gly Leu | | |
| | 420 | 425 430 |
| Leu Phe Ala Val Asn Gly Lys Pro His Phe Gly Asp Gln Glu Pro Val | | |
| | 435 | 440 445 |
| Gln Gly Phe Val Met Asn Phe Ser Asn Gly Glu Ile Ile Asp Ile Phe | | |
| 450 | 455 | 460 |
| Lys Pro Val Arg Xaa Leu Leu Asp Met Pro His Asp Ile Val Ala Ser | | |
| 465 | 470 | 475 480 |
| Glu Asp Gly Thr Val Tyr Ile Gly Arg Cys Ser Tyr Gln His Arg Val | | |
| | 485 | 490 495 |
| Gly Ser Ser Thr Leu Asp Xaa Arg Xaa Leu Gly Thr Ser Val Gln Phe | | |
| | 500 | 505 510 |
| Lys Lys Gly Leu Xaa Ile Glu Val Gln Gly Asn Pro Lys Lys Pro Glu | | |
| | 515 | 520 525 |
| Gly Ile Cys Cys Phe Pro Xaa Thr Thr Leu Arg Val Ile Pro Val Val | | |
| 530 | 535 | 540 |
| Gly Xaa Trp Arg Gly His Gly Pro Asn Leu Ile Pro Val Gly Lys Asn | | |
| 545 | 550 | 555 560 |
| Pro Arg Gly Pro Leu Gly Arg | | |

391

565

<210> 443
 <211> 129
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (123)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (127)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (129)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 443
 Arg Pro Ser Cys Ser Pro Gly Ser Val Ser Ala Ala Ala Val Asn Met
 1 5 10 15

 Glu Pro Pro Asp Ala Pro Ala Gln Ala Arg Gly Ala Pro Arg Leu Leu
 20 25 30

 Leu Leu Ala Val Leu Leu Ala Ala His Pro Asp Ala Gln Ala Glu Val
 35 40 45

 Arg Leu Ser Val Pro Pro Leu Val Glu Val Met Arg Gly Lys Ser Val
 50 55 60

 Ile Leu Asp Cys Thr Pro Thr Gly Thr His Asp His Tyr Met Leu Glu
 65 70 75 80

 Trp Phe Leu Thr Asp Arg Ser Gly Ala Arg Pro Arg Leu Ala Ser Ala
 85 90 95

 Glu Met Gln Gly Ser Glu Leu Gln Val Thr Met His Asp Thr Arg Gly
 100 105 110

 Arg Ser Pro Pro Tyr Gln Leu Gly Leu Pro Xaa Gly Ala Trp Xaa Leu
 115 120 125

Xaa

392

<210> 444

<211> 131

<212> PRT

<213> Homo sapiens

<400> 444

Glu Pro Arg Val Glu Arg Glu Thr Pro Gly Gln Pro Phe Ser Ser Ser
 1 5 10 15
 Phe Pro Ser Pro Ser Pro Phe Pro Asn Val Ala Ser Met Trp Val Leu
 20 25 30
 Gly Thr Trp Glu Lys Pro Leu Leu Cys His Phe Phe Ser Leu Phe Pro
 35 40 45
 Ser Ser Pro Pro Thr Val Trp Leu Met Met Ser Ser Gly Val Met Val
 50 55 60
 Thr Thr Pro Cys Ser Leu Phe Trp Tyr Phe Pro Cys Gln Phe Pro Leu
 65 70 75 80
 Ser Ala Arg Leu Cys Pro Lys Ile Pro Ser Ala Ser Ser Leu His Val
 85 90 95
 Ala Glu Gly Pro Gly Leu Pro Gln Val Pro Cys Leu Ser Asn Lys Val
 100 105 110
 Glu Thr Ile Lys Pro Gly Lys Lys Lys Lys Gly Gly Arg Ser Lys Gly
 115 120 125
 Ser Pro Arg
 130

<210> 445

<211> 405

<212> PRT

<213> Homo sapiens

<400> 445

Gly Thr Gly Leu Val Pro Ile Arg Gln Ser Thr Lys Phe Asp Ser Ser
 1 5 10 15
 Leu Asp Arg Lys Asp Lys Phe Ser Phe Asp Leu Gly Lys Gly Glu Val
 20 25 30
 Ile Lys Ala Trp Asp Ile Ala Ile Ala Thr Met Lys Val Gly Glu Val

393

| | | |
|---|-----|---------|
| 35 | 40 | 45 |
| Cys His Ile Thr Cys Lys Pro Glu Tyr Ala Tyr Gly Ser Ala Gly Ser | | |
| 50 | 55 | 60 |
| Pro Pro Lys Ile Pro Pro Asn Ala Thr Leu Val Phe Glu Val Glu Leu | | |
| 65 | 70 | 75 80 |
| Phe Glu Phe Lys Gly Glu Asp Leu Thr Glu Glu Glu Asp Gly Gly Ile | | |
| | 85 | 90 95 |
| Ile Arg Arg Ile Gln Thr Arg Gly Glu Gly Tyr Ala Lys Pro Asn Glu | | |
| | 100 | 105 110 |
| Gly Ala Ile Val Glu Val Ala Leu Glu Gly Tyr Tyr Lys Asp Lys Leu | | |
| | 115 | 120 125 |
| Phe Asp Gln Arg Glu Leu Arg Phe Glu Ile Gly Glu Gly Glu Asn Leu | | |
| | 130 | 135 140 |
| Asp Leu Pro Tyr Gly Leu Glu Arg Ala Ile Gln Arg Met Glu Lys Gly | | |
| 145 | 150 | 155 160 |
| Glu His Ser Ile Val Tyr Leu Lys Pro Ser Tyr Ala Phe Gly Ser Val | | |
| | 165 | 170 175 |
| Gly Lys Glu Lys Phe Gln Ile Pro Pro Asn Ala Glu Leu Lys Tyr Glu | | |
| | 180 | 185 190 |
| Leu His Leu Lys Ser Phe Glu Lys Ala Lys Glu Ser Trp Glu Met Asn | | |
| | 195 | 200 205 |
| Ser Glu Glu Lys Leu Glu Gln Ser Thr Ile Val Lys Glu Arg Gly Thr | | |
| | 210 | 215 220 |
| Val Tyr Phe Lys Glu Gly Lys Tyr Lys Gln Ala Leu Leu Gln Tyr Lys | | |
| 225 | 230 | 235 240 |
| Lys Ile Val Ser Trp Leu Glu Tyr Glu Ser Ser Phe Ser Asn Glu Glu | | |
| | 245 | 250 255 |
| Ala Gln Lys Ala Gln Ala Leu Arg Leu Ala Ser His Leu Asn Leu Ala | | |
| | 260 | 265 270 |
| Met Cys His Leu Lys Leu Gln Ala Phe Ser Ala Ala Ile Glu Ser Cys | | |
| | 275 | 280 285 |
| Asn Lys Ala Leu Glu Leu Asp Ser Asn Asn Glu Lys Gly Leu Phe Arg | | |
| | 290 | 295 300 |
| Arg Gly Glu Ala His Leu Ala Val Asn Asp Phe Glu Leu Ala Arg Ala | | |

394

305 310 315 320
 Asp Phe Gln Lys Val Leu Gln Leu Tyr Pro Asn Asn Lys Ala Ala Lys
 325 330 335
 Thr Gln Leu Ala Val Cys Gln Gln Arg Ile Arg Arg Gln Leu Ala Arg
 340 345 350
 Glu Lys Lys Leu Tyr Ala Asn Met Phe Glu Arg Leu Ala Glu Glu Glu
 355 360 365
 Asn Lys Ala Lys Ala Glu Ala Ser Ser Gly Asp His Pro Thr Asp Thr
 370 375 380
 Glu Met Lys Glu Glu Gln Lys Ser Asn Thr Ala Gly Ser Gln Ser Gln
 385 390 395 400
 Val Glu Thr Glu Ala
 405

<210> 446

<211> 232

<212> PRT

<213> Homo sapiens

<400> 446

Pro Leu Val Pro Ser Ser Gln Lys Ala Leu Leu Leu Glu Leu Lys Gly
 1 5 10 15
 Leu Gln Glu Glu Pro Val Glu Gly Phe Arg Val Thr Leu Val Asp Glu
 20 25 30
 Gly Asp Leu Tyr Asn Trp Glu Val Ala Ile Phe Gly Pro Pro Asn Thr
 35 40 45
 Tyr Tyr Glu Gly Gly Tyr Phe Lys Ala Arg Leu Lys Phe Pro Ile Asp
 50 55 60
 Tyr Pro Tyr Ser Pro Pro Ala Phe Arg Phe Leu Thr Lys Met Trp His
 65 70 75 80
 Pro Asn Ile Tyr Glu Thr Gly Asp Val Cys Ile Ser Ile Leu His Pro
 85 90 95
 Pro Val Asp Asp Pro Gln Ser Gly Glu Leu Pro Ser Glu Arg Trp Asn
 100 105 110
 Pro Thr Gln Asn Val Arg Thr Ile Leu Leu Ser Val Ile Ser Leu Leu
 115 120 125

395

Asn Glu Pro Asn Thr Phe Ser Pro Ala Asn Val Asp Ala Ser Val Met
 130 135 140

Tyr Arg Lys Trp Lys Glu Ser Lys Gly Lys Asp Arg Glu Tyr Thr Asp
 145 150 155 160

Ile Ile Arg Lys Gln Val Leu Gly Thr Arg Trp Thr Arg Val Asn Gly
 165 170 175

Val Lys Val Pro Thr Thr Leu Ala Glu Tyr Cys Val Lys Thr Lys Ala
 180 185 190

Pro Ala Pro Asp Glu Gly Ser Asp Leu Phe Tyr Asp Asp Tyr Tyr Glu
 195 200 205

Asp Gly Glu Val Glu Glu Glu Ala Asp Ser Cys Phe Gly Asp Asp Glu
 210 215 220

Asp Asp Ser Gly Thr Glu Glu Ser
 225 230

<210> 447

<211> 356

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (12)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (53)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (191)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (263)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 447

Cys Ser Pro Pro Pro Pro Pro Ala Ala Ala Ala Xaa Ala Ala Ala Ala

396

| | | | |
|---|-----|-----|-----|
| 1 | 5 | 10 | 15 |
| Ala Met Ala Gln Tyr Lys Gly Ala Ala Ser Glu Ala Gly Arg Ala Met | 20 | 25 | 30 |
| His Leu Met Lys Lys Arg Glu Lys Gln Arg Glu Gln Met Glu Gln Met | 35 | 40 | 45 |
| Lys Gln Arg Ile Xaa Glu Glu Asn Ile Met Lys Ser Asn Ile Asp Lys | 50 | 55 | 60 |
| Lys Phe Ser Ala His Tyr Asp Ala Val Glu Ala Glu Leu Lys Ser Ser | 65 | 70 | 75 |
| Thr Val Gly Leu Val Thr Leu Asn Asp Met Lys Ala Lys Gln Glu Ala | 85 | 90 | 95 |
| Leu Val Lys Glu Arg Glu Lys Gln Leu Ala Lys Lys Glu Gln Ser Lys | 100 | 105 | 110 |
| Glu Leu Gln Met Lys Leu Glu Lys Leu Arg Glu Lys Glu Arg Lys Lys | 115 | 120 | 125 |
| Glu Ala Lys Arg Lys Ile Ser Ser Leu Ser Phe Thr Leu Glu Glu Glu | 130 | 135 | 140 |
| Glu Glu Gly Gly Glu Glu Glu Glu Glu Ala Ala Met Tyr Glu Glu Glu | 145 | 150 | 155 |
| Met Glu Arg Glu Glu Ile Thr Thr Lys Lys Arg Lys Leu Gly Lys Asn | 165 | 170 | 175 |
| Pro Asp Val Asp Thr Ser Phe Leu Pro Asp Arg Asp Arg Glu Xaa Glu | 180 | 185 | 190 |
| Glu Asn Arg Leu Arg Glu Glu Leu Arg Gln Glu Trp Glu Ala Lys Gln | 195 | 200 | 205 |
| Glu Lys Ile Lys Ser Glu Glu Ile Glu Ile Thr Phe Ser Tyr Trp Asp | 210 | 215 | 220 |
| Gly Ser Gly His Arg Arg Thr Val Lys Met Arg Lys Gly Asn Thr Met | 225 | 230 | 235 |
| Gln Gln Phe Leu Gln Lys Ala Leu Glu Ile Leu Arg Lys Asp Phe Ser | 245 | 250 | 255 |
| Glu Leu Arg Ser Ala Gly Xaa Glu Gln Leu Met Tyr Ile Lys Glu Asp | 260 | 265 | 270 |
| Leu Ile Ile Pro His His His Ser Phe Tyr Asp Phe Ile Val Thr Lys | | | |

397

275 280 285
 Ala Arg Gly Lys Ser Gly Pro Leu Phe Asn Phe Asp Val His Asp Asp
 290 295 300
 Val Arg Leu Leu Ser Asp Ala Thr Val Glu Lys Asp Glu Ser His Ala
 305 310 315 320
 Gly Lys Val Val Leu Arg Ser Trp Tyr Glu Lys Asn Lys His Ile Phe
 325 330 335
 Pro Ala Ser Arg Trp Glu Pro Tyr Asp Pro Glu Lys Lys Trp Asp Lys
 340 345 350
 Tyr Thr Ile Arg
 355

<210> 448
 <211> 88
 <212> PRT
 <213> Homo sapiens

<400> 448
 Lys Thr His Lys Met Cys Asp Ala Phe Val Gly Thr Trp Lys Leu Val
 1 5 10 15
 Ser Ser Glu Asn Phe Asp Asp Tyr Met Lys Glu Val Gly Val Gly Phe
 20 25 30
 Ala Thr Arg Lys Val Ala Gly Met Ala Lys Pro Asn Met Ile Ile Ser
 35 40 45
 Val Asn Gly Asp Val Ile Thr Ile Lys Ser Glu Ser Thr Phe Lys Asn
 50 55 60
 Thr Glu Ile Ser Phe Ile Leu Gly Gln Glu Phe Asp Glu Ala Leu Gln
 65 70 75 80
 Met Thr Gly Lys Ser Arg Ala Pro
 85

<210> 449
 <211> 171
 <212> PRT
 <213> Homo sapiens

<220>

398

<221> SITE

<222> (72)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (132)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 449

Leu Ile Leu Val Leu Met Phe Val Val Trp Met Lys Arg Arg Asp Lys
 1 5 10 15

Glu Arg Gln Ala Lys Gln Leu Leu Ile Asp Pro Glu Asp Asp Val Arg
 20 25 30

Asp Asn Ile Leu Lys Tyr Asp Glu Glu Gly Gly Gly Glu Glu Asp Gln
 35 40 45

Asp Tyr Asp Leu Ser Gln Leu Gln Gln Pro Asp Thr Val Glu Pro Asp
 50 55 60

Ala Ile Lys Pro Val Gly Ile Xaa Arg Met Asp Glu Arg Pro Ile His
 65 70 75 80

Ala Glu Pro Gln Tyr Pro Val Arg Ser Ala Ala Pro His Pro Gly Asp
 85 90 95

Ile Gly Asp Phe Ile Asn Glu Gly Leu Lys Ala Ala Asp Asn Asp Pro
 100 105 110

Thr Ala Pro Pro Tyr Asp Ser Leu Leu Val Phe Asp Tyr Glu Gly Ser
 115 120 125

Gly Ser Thr Xaa Gly Ser Leu Ser Ser Leu Asn Ser Ser Ser Ser Gly
 130 135 140

Gly Glu Gln Asp Tyr Asp Tyr Leu Asn Asp Trp Gly Pro Arg Phe Lys
 145 150 155 160

Lys Leu Ala Asp Met Tyr Gly Gly Gly Asp Asp
 165 170

<210> 450

<211> 34

<212> PRT

<213> Homo sapiens

<400> 450

399

Lys Val Lys Ala Cys Cys Lys Asp Ile Phe Phe Leu Leu Leu Glu Gly
 1 5 10 15

Asn Thr Lys Arg Lys Ile Ser Phe Phe His Gly Ala Phe Asp Asn Phe
 20 25 30

Ser Leu

<210> 451

<211> 148

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (43)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (89)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 451

Arg Thr Leu His Pro Ala Thr Gly Pro Arg Ala Arg Pro Pro Arg Gly
 1 5 10 15

Trp Arg Arg Arg Leu Cys Ala Gln Gly Pro Ala Pro Asp Trp Asp Pro
 20 25 30

Gly Val Pro Pro Gly Leu Ala Ser Cys Gly Xaa Thr Val Trp Leu His
 35 40 45

Phe Ser Asp Pro Ser Leu Gly Arg Lys Val Lys Glu Thr Gly Pro Ala
 50 55 60

Ser Ala Phe Gly Leu Trp Phe Leu Asp Arg Val Leu Ser Pro Ser Pro
 65 70 75 80

Pro Ser Ser Pro Asn Leu Ser His Xaa Arg Pro Leu Pro Ala Ala Pro
 85 90 95

Ser Leu Leu Gly Ile Gly Ser Pro Glu Pro Pro Ser Pro Glu Pro Pro
 100 105 110

Thr Pro Leu Pro Gly Pro Cys Gly Cys Trp Ala Ser His Leu Lys Glu
 115 120 125

400

Gly Lys Val Val Gln Pro Glu Pro Val Glu Gln Cys Pro Val Trp Pro
 130 135 140

Pro Lys Pro Lys
 145

<210> 452

<211> 83

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (19)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (28)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (64)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (77)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (79)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 452

Asp Ser His Arg Pro Arg Ala Met Arg Ala Leu Trp Val Leu Gly Leu
 1 5 10 15

Ser Cys Xaa Leu Leu Thr Phe Gly Ser Val Arg Xaa Asp Asp Glu Val
 20 25 30

Asp Val Asp Gly Thr Val Glu Glu Asp Leu Gly Lys Ser Arg Glu Gly
 35 40 45

Ser Arg Thr Asp Asp Glu Val Val Gln Arg Glu Glu Glu Ala Ile Xaa
 50 55 60

401

Val Gly Trp Ile Lys Cys Ile Pro Asn Lys Arg Thr Xaa Glu Xaa Lys
 65 70 75 80

Ser Arg Lys

<210> 453

<211> 240

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (234)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 453

Gly Trp Leu Pro Cys Gly Ser Ser Val Val Pro Ala Thr Pro Gly Ser
 1 5 10 15

Pro Pro Ser Arg Phe Trp Leu Leu Pro Ala Met Ala Leu Arg Val Leu
 20 25 30

Leu Leu Thr Ala Leu Thr Leu Cys His Gly Phe Asn Leu Asp Thr Glu
 35 40 45

Asn Ala Met Thr Phe Gln Glu Asn Ala Arg Gly Phe Gly Gln Ser Val
 50 55 60

Val Gln Leu Gln Gly Ser Arg Val Val Val Gly Ala Pro Gln Glu Ile
 65 70 75 80

Val Ala Ala Asn Gln Arg Gly Ser Leu Tyr Gln Cys Asp Tyr Ser Thr
 85 90 95

Gly Ser Cys Glu Pro Ile His Leu Gln Val Pro Val Glu Ala Val Asn
 100 105 110

Met Ser Leu Gly Leu Ser Leu Ala Ala Thr Thr Ser Pro Pro Gln Leu
 115 120 125

Leu Ala Cys Gly Pro Thr Val His Gln Thr Cys Ser Glu Asn Thr Tyr
 130 135 140

Val Lys Gly Leu Cys Phe Leu Phe Gly Ser Asn Leu Arg Gln Gln Pro
 145 150 155 160

Gln Lys Phe Pro Glu Ala Leu Arg Gly Cys Pro Gln Glu Asp Ser Asp
 165 170 175

402

Ile Ala Phe Leu Ile Asp Gly Ser Gly Ser Ile Ile Pro His Asp Phe
 180 185 190
 Arg Arg Met Lys Glu Phe Val Ser Thr Val Met Glu Gln Leu Lys Lys
 195 200 205
 Ser Lys Thr Leu Phe Ser Leu Met Gln Tyr Ser Glu Glu Phe Arg Ile
 210 215 220
 His Phe Thr Ser Lys Ser Ser Arg Thr Xaa Leu Thr Gln Asp His Trp
 225 230 235 240

<210> 454

<211> 244

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (206)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (227)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (229)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (239)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 454

Lys Trp Cys Ser Trp Thr Leu Leu Lys Ile Trp Glu Val Thr Cys Thr
 1 5 10 15

Trp Lys Leu Pro Thr Leu Ala Lys Phe Ser Pro Tyr Leu Gly Gln Met
 20 25 30

Ile Asn Leu Arg Arg Leu Leu Leu Ser His Ile His Ala Ser Ser Tyr

403

35 40 45
 Ile Ser Pro Glu Lys Glu Glu Gln Tyr Ile Ala Gln Phe Thr Ser Gln
 50 55 60
 Phe Leu Ser Leu Gln Cys Leu Gln Leu Leu Tyr Val Asp Ser Leu Phe
 65 70 75 80
 Phe Leu Arg Gly Arg Leu Asp Gln Leu Leu Arg His Val Met Asn Pro
 85 90 95
 Leu Glu Thr Leu Ser Ile Thr Asn Cys Arg Leu Ser Glu Gly Asp Val
 100 105 110
 Met His Leu Ser Gln Ser Pro Ser Val Ser Gln Leu Ser Val Leu Ser
 115 120 125
 Leu Ser Gly Val Met Leu Thr Asp Val Ser Pro Glu Pro Leu Gln Ala
 130 135 140
 Leu Leu Glu Arg Ala Ser Ala Thr Leu Gln Asp Leu Val Phe Asp Glu
 145 150 155 160
 Cys Gly Ile Thr Asp Asp Gln Leu Leu Ala Leu Leu Pro Ser Leu Ser
 165 170 175
 His Cys Ser Gln Leu Thr Thr Leu Ser Phe Tyr Gly Asn Ser Ile Ser
 180 185 190
 Ile Ser Ala Leu Gln Ser Leu Leu Gln His Leu Ile Gly Xaa Ser Asn
 195 200 205
 Leu Thr His Val Leu Tyr Pro Val Pro Leu Glu Ser Tyr Glu Asp Ile
 210 215 220
 His Gly Xaa Leu Xaa Leu Glu Arg Leu Leu Ser Ala Cys Gln Xaa Gln
 225 230 235 240
 Gly Val Ala Val

<210> 455

<211> 195

<212> PRT

<213> Homo sapiens

<400> 455

His Glu Gly Thr Gln Ser Phe Val Phe Gln Arg Glu Glu Ile Ala Gln
 1 5 10 15

404

Leu Ala Arg Gln Tyr Ala Gly Leu Asp His Glu Leu Ala Phe Ser Arg
 20 25 30
 Leu Ile Val Glu Leu Arg Arg Leu His Pro Gly His Val Leu Pro Asp
 35 40 45
 Glu Glu Leu Gln Trp Val Phe Val Asn Ala Gly Gly Trp Met Gly Ala
 50 55 60
 Met Cys Leu Leu His Ala Ser Leu Ser Glu Tyr Val Leu Leu Phe Gly
 65 70 75 80
 Thr Ala Leu Gly Ser Arg Gly His Ser Gly Arg Tyr Trp Ala Glu Ile
 85 90 95
 Ser Asp Thr Ile Ile Ser Gly Thr Phe His Gln Trp Arg Glu Gly Thr
 100 105 110
 Thr Lys Ser Glu Val Phe Tyr Pro Gly Glu Thr Val Val His Gly Pro
 115 120 125
 Gly Glu Ala Thr Ala Val Glu Trp Gly Pro Asn Thr Trp Met Val Glu
 130 135 140
 Tyr Gly Arg Gly Val Ile Pro Ser Thr Leu Ala Phe Ala Leu Ala Asp
 145 150 155 160
 Thr Val Phe Ser Thr Gln Asp Phe Leu Thr Leu Phe Tyr Thr Leu Arg
 165 170 175
 Ser Tyr Ala Arg Gly Leu Arg Leu Glu Leu Thr Thr Tyr Leu Phe Gly
 180 185 190
 Gln Asp Pro
 195

<210> 456

<211> 36

<212> PRT

<213> Homo sapiens

<400> 456

Leu Val Thr Leu Leu His Ala Met Gln Ala Arg Asp Lys Thr Leu Gly
 1 5 10 15
 Leu Ala Thr Leu Cys Ile Gly Gly Gly Gln Gly Ile Ala Met Val Ile
 20 25 30

Glu Arg Leu Asn

35

<210> 457

<211> 152

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (86)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (114)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 457

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Thr | Ala | Ala | Ala | Ser | Val | Arg | Ala | Leu | Gln | Val | Thr | Val | Ala | Gly |
| 1 | | | | | 5 | | | | 10 | | | | | 15 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Leu | Leu | Val | Phe | Phe | Leu | Phe | Gly | Ala | Pro | Leu | Asp | Ser | Leu | Pro |
| | | | 20 | | | | | 25 | | | | | 30 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Met | Lys | Ala | Leu | Ser | Pro | Val | Arg | Gly | Cys | Tyr | Glu | Ala | Val | Cys |
| | | 35 | | | | | 40 | | | | | 45 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Leu | Ser | Glu | Arg | Ser | Leu | Ala | Ile | Ala | Arg | Gly | Arg | Gly | Lys | Gly |
| | 50 | | | | | 55 | | | | | 60 | | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pro | Ala | Ala | Glu | Glu | Pro | Leu | Ser | Leu | Leu | Asp | Asp | Met | Asn | His | Cys |
| 65 | | | | | 70 | | | | | 75 | | | | 80 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Tyr | Ser | Arg | Leu | Arg | Xaa | Leu | Val | Pro | Gly | Val | Pro | Arg | Gly | Thr | Gln |
| | | | 85 | | | | | | 90 | | | | | 95 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Ser | Gln | Val | Glu | Ile | Leu | Gln | Arg | Val | Ile | Asp | Tyr | Ile | Leu | Asp |
| | | 100 | | | | | 105 | | | | | | 110 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Xaa | Val | Val | Leu | Ala | Glu | Pro | Ala | Pro | Gly | Pro | Pro | Asp | Gly | Pro |
| | | 115 | | | | | 120 | | | | | | 125 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| His | Leu | Pro | Ile | Gln | Thr | Ala | Glu | Leu | Ala | Pro | Glu | Leu | Val | Ile | Ser |
| | 130 | | | | | 135 | | | | | 140 | | | | |

| | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Asp | Lys | Arg | Ser | Phe | Cys | His |
| 145 | | | | | 150 | | |

<210> 458

<211> 31

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (17)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (25)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (31)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 458

Leu Leu Asn Asn Phe Ile Phe Leu Glu Thr His Tyr Leu Trp Ala Cys

1

5

10

15

Xaa Thr Trp Thr Ile Trp Pro Asn Xaa Leu Asp Lys Lys Gly Xaa

20

25

30

<210> 459

<211> 157

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (28)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (72)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (124)

<223> Xaa equals any of the naturally occurring L-amino acids

407

<220>

<221> SITE

<222> (130)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 459

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asp | Pro | Arg | Val | Arg | Glu | Thr | Thr | Val | Lys | Ala | Arg | Ala | Arg | Ser | Gln |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| His | Ala | Gly | Gly | Pro | Glu | Leu | Gly | Leu | Ser | Gln | Xaa | Tyr | Val | Thr | Pro |
| | | 20 | | | | | | 25 | | | | | | 30 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Arg | Pro | Phe | Glu | Lys | Ser | Arg | Leu | Asp | Gln | Glu | Leu | Lys | Leu | Ile |
| | | 35 | | | | | 40 | | | | | 45 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Glu | Tyr | Gly | Leu | Arg | Asn | Lys | Arg | Glu | Val | Trp | Arg | Val | Lys | Phe |
| | 50 | | | | | 55 | | | | | 60 | | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Leu | Ala | Lys | Ile | Arg | Lys | Xaa | Ala | Arg | Glu | Leu | Leu | Thr | Leu | Asp |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Lys | Asp | Pro | Arg | Arg | Leu | Phe | Glu | Gly | Asn | Ala | Leu | Leu | Arg | Arg |
| | | | | 85 | | | | | 90 | | | | | 95 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Val | Arg | Ile | Gly | Val | Leu | Asp | Glu | Gly | Lys | Met | Lys | Leu | Asp | Tyr |
| | | 100 | | | | | | 105 | | | | | 110 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Leu | Gly | Leu | Lys | Met | Arg | Ile | Leu | Gly | Glu | Xaa | Ser | Ala | Asp | Pro |
| | 115 | | | | | | 120 | | | | | 125 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Xaa | Ser | Ser | Trp | Gly | Trp | Pro | Ile | His | Pro | Pro | Cys | Pro | Val | Leu |
| | 130 | | | | | 135 | | | | | | 140 | | | |

| | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Arg | Gln | Ala | Thr | Gln | Val | Arg | Lys | Gln | Val | Val | Asn |
| 145 | | | | | | 150 | | | | 155 | | |

<210> 460

<211> 136

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (119)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (130)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (135)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 460

Ile Trp Ala Pro Phe Pro His His Gln Gly Ser Gly Ser Gln Val Ser
1 5 10 15

Ser Tyr Gly Thr Gly Ala Leu Lys Ser His Ile Met Ala Ala Lys Ala
20 25 30

Val Ala Asn Thr Met Arg Thr Ser Leu Gly Pro Asn Gly Leu Asp Lys
35 40 45

Met Met Val Asp Lys Asp Gly Asp Val Thr Val Thr Asn Asp Gly Ala
50 55 60

Thr Ile Leu Ser Met Met Asp Val Asp His Gln Ile Ala Lys Leu Met
65 70 75 80

Val Glu Leu Ser Lys Ser Gln Asp Asp Glu Ile Gly Asp Gly Asp His
85 90 95

Gly Gly Gly Cys Pro Gly Arg Arg Pro Ala Gly Arg Arg Pro Ser Ser
100 105 110

Cys Trp Thr Ala Ala Phe Xaa Arg Ser Gly Ser Pro Thr Val Thr Ser
115 120 125

Arg Xaa Pro Ala Leu Ala Xaa Glu
130 135

<210> 461

<211> 390

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (11)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (14)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (375)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (382)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (383)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (386)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (387)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 461
 Cys Gly Asn Trp Trp Val Pro Arg Ala Gly Xaa Asn Trp Xaa Arg Gly
 1 5 10 15
 Ser Arg Phe Leu Phe Val Asp Arg Cys Asp Arg His Leu Thr Met Gln
 20 25 30
 Ile Phe Val Lys Thr Leu Thr Gly Lys Thr Ile Thr Leu Glu Val Glu
 35 40 45
 Pro Ser Asp Thr Ile Glu Asn Val Lys Ala Lys Ile Gln Asp Lys Glu
 50 55 60
 Gly Ile Pro Pro Asp Gln Gln Arg Leu Ile Phe Ala Gly Lys Gln Leu
 65 70 75 80
 Glu Asp Gly Arg Thr Leu Ser Asp Tyr Asn Ile Gln Lys Glu Ser Thr
 85 90 95
 Leu His Leu Val Leu Arg Leu Arg Gly Gly Met Gln Ile Phe Val Lys
 100 105 110
 Thr Leu Thr Gly Lys Thr Ile Thr Leu Glu Val Glu Pro Ser Asp Thr
 115 120 125

Ile Glu Asn Val Lys Ala Lys Ile Gln Asp Lys Glu Gly Ile Pro Pro
 130 135 140
 Asp Gln Gln Arg Leu Ile Phe Ala Gly Lys Gln Leu Glu Asp Gly Arg
 145 150 155 160
 Thr Leu Ser Asp Tyr Asn Ile Gln Lys Glu Ser Thr Leu His Leu Val
 165 170 175
 Leu Arg Leu Arg Gly Gly Met Gln Ile Phe Val Lys Thr Leu Thr Gly
 180 185 190
 Lys Thr Ile Thr Leu Glu Val Glu Pro Ser Asp Thr Ile Glu Asn Val
 195 200 205
 Lys Ala Lys Ile Gln Asp Lys Glu Gly Ile Pro Pro Asp Gln Gln Arg
 210 215 220
 Leu Ile Phe Ala Gly Lys Gln Leu Glu Asp Gly Arg Thr Leu Ser Asp
 225 230 235 240
 Tyr Asn Ile Gln Lys Glu Ser Thr Leu His Leu Val Leu Arg Leu Arg
 245 250 255
 Gly Gly Met Gln Ile Phe Val Lys Thr Leu Thr Gly Lys Thr Ile Thr
 260 265 270
 Leu Glu Val Glu Pro Ser Asp Thr Ile Glu Asn Val Lys Ala Lys Ile
 275 280 285
 Gln Asp Lys Glu Gly Ile Pro Pro Asp Gln Gln Arg Leu Ile Phe Ala
 290 295 300
 Gly Lys Gln Leu Glu Asp Gly Arg Thr Leu Ser Asp Tyr Asn Ile Gln
 305 310 315 320
 Lys Glu Ser Thr Leu His Leu Val Leu Arg Leu Arg Gly Gly Met Gln
 325 330 335
 Ile Phe Val Lys Thr Leu Thr Gly Lys Thr Ile Thr Leu Glu Val Glu
 340 345 350
 Pro Ser Asp Thr Ile Glu Asn Val Lys Ala Arg Ser Arg Gln Gly Arg
 355 360 365
 His Pro Pro Asp Gln Gln Xaa Leu Ile Leu Leu Gly Lys Xaa Xaa Lys
 370 375 380
 Trp Xaa Xaa Pro Phe Asp
 385 390

411

<210> 462

<211> 171

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (74)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (135)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (142)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (155)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 462

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Ser | Thr | Val | Arg | Ile | Pro | Gly | Ser | Thr | His | Ala | Ser | Gly | Leu | Ser |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Arg | Ala | Ser | Pro | Val | Tyr | Leu | Ala | Ser | Met | Ser | Gly | Arg | Gly | Lys |
| | | | 20 | | | | | 25 | | | | | 30 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Gly | Gly | Lys | Ala | Arg | Ala | Lys | Ala | Lys | Ser | Arg | Ser | Ser | Arg | Ala |
| | 35 | | | | | | 40 | | | | | 45 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Leu | Gln | Phe | Pro | Val | Gly | Arg | Val | His | Arg | Leu | Leu | Arg | Lys | Gly |
| | 50 | | | | | 55 | | | | | 60 | | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| His | Tyr | Ala | Glu | Arg | Val | Gly | Ala | Gly | Xaa | Pro | Val | Tyr | Leu | Ala | Ala |
| 65 | | | | | 70 | | | | | 75 | | | | 80 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Leu | Glu | Tyr | Leu | Thr | Ala | Glu | Ile | Leu | Glu | Leu | Ala | Gly | Asn | Ala |
| | | | | 85 | | | | | 90 | | | | | 95 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Arg | Asp | Asn | Lys | Lys | Thr | Arg | Ile | Ile | Pro | Arg | His | Leu | Gln | Leu |
| | | | 100 | | | | | 105 | | | | | 110 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Ile | Arg | Asn | Asp | Glu | Glu | Leu | Asn | Lys | Leu | Leu | Gly | Gly | Val | Thr |
| | 115 | | | | | | | 120 | | | | | 125 | | |

412

Ile Ala Gln Gly Arg Arg Xaa Ala Gln His Pro Gly Arg Xaa Cys Cys
 130 135 140

Pro Arg Arg Pro Ala Pro Pro Trp Gly Arg Xaa Pro Phe Gly Gly Gln
 145 150 155 160

Glu Arg Ala Thr Lys Ala Ser Gln Gly Val Leu
 165 170

<210> 463

<211> 433

<212> PRT

<213> Homo sapiens

<400> 463

Arg Val Arg Ala Pro Pro Arg Pro Pro Leu Gly Pro Ser Arg Pro Ser
 1 5 10 15

His His Val His Pro Leu Gln Leu Pro Gly Ile Arg Glu Val Thr Ile
 20 25 30

Asn Gln Ser Leu Leu Ala Pro Leu Arg Leu Asp Ala Asp Pro Ser Leu
 35 40 45

Gln Arg Val Arg Gln Glu Glu Ser Glu Gln Ile Lys Thr Leu Asn Asn
 50 55 60

Lys Phe Ala Ser Phe Ile Asp Lys Val Arg Phe Leu Glu Gln Gln Asn
 65 70 75 80

Lys Leu Leu Glu Thr Lys Trp Thr Leu Leu Gln Glu Gln Lys Ser Ala
 85 90 95

Lys Ser Ser Arg Leu Pro Asp Ile Phe Glu Ala Gln Ile Ala Gly Leu
 100 105 110

Arg Gly Gln Leu Glu Ala Leu Gln Val Asp Gly Gly Arg Leu Glu Ala
 115 120 125

Glu Leu Arg Ser Met Gln Asp Val Val Glu Asp Phe Lys Asn Lys Tyr
 130 135 140

Glu Asp Glu Ile Asn Arg Arg Thr Ala Ala Glu Asn Glu Phe Val Val
 145 150 155 160

Leu Lys Lys Asp Val Asp Ala Ala Tyr Met Ser Lys Val Glu Leu Glu
 165 170 175

413

Ala Lys Val Asp Ala Leu Asn Asp Glu Ile Asn Phe Leu Arg Thr Leu
 180 185 190
 Asn Glu Thr Glu Leu Thr Glu Leu Gln Ser Gln Ile Ser Asp Thr Ser
 195 200 205
 Val Val Leu Ser Met Asp Asn Ser Arg Ser Leu Asp Leu Asp Gly Ile
 210 215 220
 Ile Ala Glu Val Lys Ala Gln Tyr Glu Glu Met Ala Lys Cys Ser Arg
 225 230 235 240
 Ala Glu Ala Glu Ala Trp Tyr Gln Thr Lys Phe Glu Thr Leu Gln Ala
 245 250 255
 Gln Ala Gly Lys His Gly Asp Asp Leu Arg Asn Thr Arg Asn Glu Ile
 260 265 270
 Ser Glu Met Asn Arg Ala Ile Gln Arg Leu Gln Ala Glu Ile Asp Asn
 275 280 285
 Ile Lys Asn Gln Arg Ala Lys Leu Glu Ala Ala Ile Ala Glu Ala Glu
 290 295 300
 Glu Arg Gly Glu Leu Ala Leu Lys Asp Ala Arg Ala Lys Gln Glu Glu
 305 310 315 320
 Leu Glu Ala Ala Leu Gln Arg Ala Lys Gln Asp Met Ala Arg Gln Leu
 325 330 335
 Arg Glu Tyr Gln Glu Leu Met Ser Val Lys Leu Ala Leu Asp Ile Glu
 340 345 350
 Ile Ala Thr Tyr Arg Lys Leu Leu Glu Gly Glu Glu Ser Arg Leu Ala
 355 360 365
 Gly Asp Gly Val Gly Ala Val Asn Ile Ser Val Met Asn Ser Thr Gly
 370 375 380
 Gly Ser Ser Ser Gly Gly Gly Ile Gly Leu Thr Leu Gly Gly Thr Met
 385 390 395 400
 Gly Ser Asn Ala Leu Ser Phe Ser Ser Ser Ala Gly Pro Gly Leu Leu
 405 410 415
 Lys Ala Tyr Ser Ile Arg Thr Ala Ser Ala Ser Arg Arg Ser Ala Arg
 420 425 430

Asp

<210> 464
<211> 121
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (50)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (64)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (110)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (114)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (115)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (117)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 464
Gly Ser Gly Cys Val Phe Ala Ile Leu Gly Arg Arg Cys Ser Arg Pro
1 5 10 15
Trp Arg Ile Trp Pro Gly Glu Pro Leu Gln Arg Ala Pro Pro Ala Ala
20 25 30
Gly Thr Arg Trp Pro His Gly His Arg Ser Ser Pro Val Gly Thr Pro
35 40 45
Gly Xaa Ala Pro Asn Val Pro Ala Ile Trp Gln Gln Pro Leu Trp Xaa
50 55 60
Glu Tyr Ser Cys Glu Tyr Gly Ser Met Lys Phe Tyr Ala Leu Cys Gly

415

65 70 75 80
 Phe Gly Gly Val Leu Ser Cys Gly Leu Thr His Thr Ala Val Val Pro
 85 90 95
 Leu Asp Leu Val Lys Cys Arg Met Gln Val Asp Pro Gln Xaa Tyr Lys
 100 105 110
 Gly Xaa Xaa Asn Xaa Ile Leu Ile Asn
 115 120

<210> 465
 <211> 68
 <212> PRT
 <213> Homo sapiens

<400> 465
 Arg Ile Pro Ala Pro Ala Ser Ser Arg His Ser Gly Gly Arg Cys Ala
 1 5 10 15
 Ala Gly Pro Arg Gly Pro Pro Ala Thr Ala Ser Arg Ala Leu Arg Ala
 20 25 30
 Val His Arg Pro Leu Asp Ala Ala Arg Gly Arg Thr Gly Ser Thr Ser
 35 40 45
 His Leu Cys Ser Ser Ser Tyr Thr Ile Gly Cys Leu Leu Trp Phe Ser
 50 55 60
 Gln Lys Ala Met
 65

<210> 466
 <211> 224
 <212> PRT
 <213> Homo sapiens

<400> 466
 Ala Thr Ile Leu Glu Arg Glu Ala Glu Gln Ser Arg Leu Gly Ala Thr
 1 5 10 15
 Glu Arg Ala Ala Ala Ala Met Asn Pro Glu Tyr Asp Tyr Leu Phe
 20 25 30
 Lys Leu Leu Leu Ile Gly Asp Ser Gly Val Gly Lys Ser Cys Leu Leu
 35 40 45

416

Leu Arg Phe Ala Asp Asp Thr Tyr Thr Glu Ser Tyr Ile Ser Thr Ile
 50 55 60
 Gly Val Asp Phe Lys Ile Arg Thr Ile Glu Leu Asp Gly Lys Thr Ile
 65 70 75 80
 Lys Leu Gln Ile Trp Asp Thr Ala Gly Gln Glu Arg Phe Arg Thr Ile
 85 90 95
 Thr Ser Ser Tyr Tyr Arg Gly Ala His Gly Ile Ile Val Val Tyr Asp
 100 105 110
 Val Thr Asp Gln Glu Ser Tyr Ala Asn Val Lys Gln Trp Leu Gln Glu
 115 120 125
 Ile Asp Arg Tyr Ala Ser Glu Asn Val Asn Lys Leu Leu Val Gly Asn
 130 135 140
 Lys Ser Asp Leu Thr Thr Lys Lys Val Val Asp Asn Thr Thr Ala Lys
 145 150 155 160
 Glu Phe Ala Asp Ser Leu Gly Ile Pro Phe Leu Glu Thr Ser Ala Lys
 165 170 175
 Asn Ala Thr Asn Val Glu Gln Ala Phe Met Thr Met Ala Ala Glu Ile
 180 185 190
 Lys Lys Arg Met Gly Pro Gly Ala Ala Ser Gly Gly Glu Arg Pro Asn
 195 200 205
 Leu Lys Ile Asp Ser Thr Pro Val Lys Pro Ala Gly Gly Gly Cys Cys
 210 215 220

<210> 467

<211> 76

<212> PRT

<213> Homo sapiens

<400> 467

Ser Glu Ala Pro Gly Glu Ser Val Gly Thr Thr Pro Glu Ala Gln Met
 1 5 10 15

Lys Thr Gly Pro Phe Ala Glu His Ser Asn Gln Leu Trp Asn Ile Ser
 20 25 30

Ala Val Pro Ser Trp Ser Lys Val Asn Gln Gly Leu Ile Arg Met Tyr

417

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 35 | | | | | 40 | | | | | 45 | | | | | |
| Lys | Ala | Glu | Cys | Leu | Glu | Lys | Phe | Pro | Val | Ile | Gln | His | Phe | Lys | Phe |
| 50 | | | | | 55 | | | | | 60 | | | | | |
| | | | | | | | | | | | | | | | |
| Gly | Ser | Leu | Leu | Pro | Ile | His | Pro | Val | Thr | Ser | Gly | | | | |
| 65 | | 70 | | | | | 75 | | | | | | | | |

```
<210> 468
<211> 111
<212> PRT
<213> Homo sapiens
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```
<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
<221> SITE
<222> (47)
<223> Xaa equals any of the naturally occurring L-amino acids
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```
<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids
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```

<220>
<221> SITE
<222> (78)
<223> Xaa equals any of the naturally occurring L-amino acids

```

```
<220>
<221> SITE
<222> (97)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<400> 468
Ser Leu Ala Arg Thr Gly Pro Arg Ser Leu Ala Arg Pro Cys Arg Arg
1 5 10 15

Arg Pro Ala His Arg His Pro Leu Gln Pro Cys Pro Pro Gly Xaa Cys
20 25 30

<213> Homo sapiens

| Pro | Arg | Val | Arg | Pro | Arg | Val | Arg | Pro | Arg | Val | Arg | Leu | Ser | Ser | Pro |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | | | | 5 | | | | 10 | | | | | | | 15 |

Ser Pro Val Cys Leu Pro Pro Ala Ala Ala Thr Met Thr Thr Ser Ile
20 25 30

Arg Gln Phe Thr Ser Ser Ser Ser Ile Lys Gly Ser Ser Gly Leu Gly
35 40 45

Gly Gly Ser Ser Arg Thr Ser Cys Arg Leu Ser Gly Gly Leu Gly Ala
50 55 60

Gly Ser Cys Arg Leu Gly Ser Ala Gly Gly Leu Gly Ser Thr Leu Gly
65 70 75 80

Gly Ser Ser Tyr Ser Ser Cys Tyr Ser Phe Gly Ser Gly Gly Gly Tyr
85 90 95

Gly Ser Ser Phe Gly Gly Val Asp Gly Leu Leu Ala Gly Gly Glu Lys
100 105 110

Ala Thr Met Gln Asn Leu Asn Asp Arg Leu Ala Ser Tyr Leu Asp Lys
115 120 125

Val Arg Ala Leu Glu Glu Ala Asn Thr Glu Leu Glu Val Lys Ile Arg
130 135 140

Asp Trp Tyr Gln Arg Gln Ala Pro Gly Pro Ala Arg Asp Tyr Ser Gln
 145 150 155 160
 Tyr Tyr Arg Thr Ile Glu Glu Leu Gln Asn Lys Ile Leu Thr Ala Thr
 165 170 175
 Val Asp Asn Ala Asn Ile Leu Leu Gln Ile Asp Asn Ala Arg Leu Ala
 180 185 190
 Ala Asp Asp Phe Arg Thr Lys Phe Glu Thr Glu Gln Ala Leu Arg Leu
 195 200 205
 Ser Val Glu Ala Asp Ile Asn Gly Leu Arg Arg Val Leu Asp Glu Leu
 210 215 220
 Thr Leu Ala Arg Ala Asp Leu Glu Met Gln Ile Glu Asn Leu Lys Glu
 225 230 235 240
 Glu Leu Ala Tyr Leu Lys Lys Asn His Glu Glu Glu Met Asn Ala Leu
 245 250 255
 Arg Gly Gln Val Gly Gly Glu Ile Asn Val Glu Met Asp Ala Ala Pro
 260 265 270
 Gly Val Asp Leu Ser Arg Ile Leu Asn Glu Met Arg Asp Gln Tyr Glu
 275 280 285
 Lys Met Ala Glu Lys Asn Arg Lys Asp Ala Glu Asp Trp Phe Phe Ser
 290 295 300
 Lys Thr Glu Glu Leu Asn Arg Glu Val Ala Thr Asn Ser Glu Leu Val
 305 310 315 320
 Gln Ser Gly Lys Ser Glu Ile Ser Glu Leu Arg Arg Thr Met Gln Ala
 325 330 335
 Leu Glu Ile Glu Leu Gln Ser Gln Leu Ser Met Lys Ala Ser Leu Glu
 340 345 350
 Gly Asn Leu Ala Glu Thr Glu Asn Arg Tyr Cys Val Gln Leu Ser Gln
 355 360 365
 Ile Gln Gly Leu Ile Gly Ser Val Glu Glu Gln Leu Ala Gln Leu Arg
 370 375 380
 Cys Glu Met Glu Gln Gln Asn Gln Glu Tyr Lys Ile Leu Leu Asp Val
 385 390 395 400
 Lys Thr Arg Leu Glu Gln Glu Ile Ala Thr Tyr Arg Arg Leu Leu Glu
 405 410 415

420

Gly Glu Asp Ala His Leu Thr Gln Tyr Lys Lys Glu Pro Val Thr Thr
 420 425 430

Arg Gln Val Arg Thr Ile Val Glu Glu Val Gln Asp Gly Lys Val Ile
 435 440 445

Ser Ser Arg Glu Gln Val His Gln Thr Thr Arg
 450 455

<210> 470

<211> 158

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (158)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 470

Pro Pro Pro Pro Pro Pro Pro Glu Leu Cys Ser Met Ala Ser Arg Arg
 1 5 10 15

Met Glu Thr Lys Pro Val Ile Thr Cys Leu Lys Thr Leu Leu Ile Ile
 20 25 30

Tyr Ser Phe Val Phe Trp Ile Thr Gly Val Ile Leu Leu Ala Val Gly
 35 40 45

Val Trp Gly Lys Leu Thr Leu Gly Thr Tyr Ile Ser Leu Ile Ala Glu
 50 55 60

Asn Ser Thr Asn Ala Pro Tyr Val Leu Ile Gly Thr Gly Thr Thr Ile
 65 70 75 80

Val Val Phe Gly Leu Phe Gly Cys Phe Ala Thr Cys Arg Gly Ser Pro
 85 90 95

Trp Met Leu Lys Leu Tyr Ala Met Phe Leu Ser Leu Val Phe Leu Ala
 100 105 110

Glu Leu Val Ala Gly Ile Ser Gly Phe Val Phe Arg His Glu Ile Lys
 115 120 125

Asp Thr Phe Leu Arg Thr Tyr Thr Asp Ala Met Gln Thr Tyr Asn Gly
 130 135 140

Asn Asp Glu Arg Ser Arg Ala Val Asp His Val Gln Arg Xaa
 145 150 155

421

<210> 471

<211> 59

<212> PRT

<213> Homo sapiens

<400> 471

Val Leu Phe Phe Tyr Glu Cys Pro Asn Leu Cys Phe Pro Leu Pro Ser
1 5 10 15

Gln Thr Val Trp Pro Val Glu Ser Val Trp Phe Val Phe Ile Ser Pro
20 25 30

Ser Phe Leu Glu Gln Gly Leu Arg Pro Cys His Ile Ser Tyr Ala Leu
35 40 45

His Pro Arg Leu Phe Trp Thr Leu Lys Val Asp
50 55

<210> 472

<211> 320

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (48)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (49)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (53)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (105)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 472

Asp Pro Asp Glu Val Phe Pro Val Cys Leu Pro Leu Thr Gly Asp Ala
1 5 10 15

Gly Glu Asp Gly Gly Lys Met Leu His Leu Pro Glu Trp Pro Glu Gln
 20 25 30
 Pro Pro Gly Gly Pro Ala Ala Leu Gln Val Arg Gly Ala Glu Asp Xaa
 35 40 45
 Xaa Leu Ser Phe Xaa Asp Cys Glu Ser Leu Gln Ala Val Phe Asp Pro
 50 55 60
 Ala Ser Cys Pro His Met Leu Arg Ala Pro Ala Arg Val Leu Gly Glu
 65 70 75 80
 Ala Val Leu Pro Phe Ser Pro Ala Leu Ala Glu Val Thr Leu Gly Ile
 85 90 95
 Gly Arg Gly Ala Gly Ser Ser Trp Xaa Tyr His Glu Glu Glu Ala Asp
 100 105 110
 Ser Thr Ala Lys Ala Met Val Thr Glu Met Cys Leu Gly Glu Glu Asp
 115 120 125
 Phe Gln Gln Leu Gln Ala Gln Glu Gly Val Ala Ile Thr Phe Cys Leu
 130 135 140
 Lys Glu Phe Arg Gly Leu Leu Ser Phe Ala Glu Ser Ala Asn Leu Asn
 145 150 155 160
 Leu Ser Ile His Phe Asp Ala Pro Gly Arg Pro Ala Ile Phe Thr Ile
 165 170 175
 Lys Asp Ser Leu Leu Asp Gly His Phe Val Leu Ala Thr Leu Ser Asp
 180 185 190
 Thr Asp Ser His Ser Gln Asp Leu Gly Ser Pro Glu Arg His Gln Pro
 195 200 205
 Val Pro Gln Leu Gln Ala His Ser Thr Pro His Pro Asp Asp Phe Ala
 210 215 220
 Asn Asp Asp Ile Asp Ser Tyr Met Ile Ala Met Glu Thr Thr Ile Gly
 225 230 235 240
 Asn Glu Gly Ser Arg Val Leu Pro Ser Ile Ser Leu Ser Pro Gly Pro
 245 250 255
 Gln Pro Pro Lys Ser Pro Gly Pro His Ser Glu Glu Glu Asp Glu Ala
 260 265 270
 Glu Pro Ser Thr Val Pro Gly Thr Pro Pro Pro Lys Lys Phe Arg Ser
 275 280 285

423

Leu Phe Phe Gly Ser Ile Leu Ala Pro Val Arg Ser Pro Gln Gly Pro
 290 295 300

Ser Leu Cys Trp Arg Lys Thr Val Arg Val Lys Ala Glu Pro Arg Thr
 305 310 315 320

<210> 473

<211> 331

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (24)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (283)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (299)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (324)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 473

Pro Pro Cys Ala Val Pro Gly Pro Arg Leu Ser Pro Lys Leu Arg Thr
 1 5 10 15

Pro Ser Asn Ser Arg Glu Ser Xaa Ile Cys Val Ser Gly Arg Ala Glu
 20 25 30

Ala Leu Thr Phe Arg His Gly Ala Glu Gly Ser Asp Arg Arg Arg Gln
 35 40 45

Arg Arg Glu Gly Val Leu Gly Pro Ala Leu Leu Cys Arg Pro Trp Glu
 50 55 60

Val Leu Gly Ala His Glu Val Pro Ser Arg Asn Ile Phe Ser Glu Gln

424

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 65 | | 70 | | 75 | | 80 | | | | | | | | | |
| Thr | Ile | Pro | Pro | Ser | Ala | Lys | Tyr | Gly | Gly | Arg | His | Thr | Val | Thr | Met |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Ile | Pro | Gly | Asp | Gly | Ile | Gly | Pro | Glu | Leu | Met | Leu | His | Val | Lys | Ser |
| | | 100 | | | | | | 105 | | | | | 110 | | |
| Val | Phe | Arg | His | Ala | Cys | Val | Pro | Val | Asp | Phe | Glu | Glu | Val | His | Val |
| | 115 | | | | | | 120 | | | | | 125 | | | |
| Ser | Ser | Asn | Ala | Asp | Glu | Glu | Asp | Ile | Arg | Asn | Ala | Ile | Met | Ala | Ile |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Arg | Arg | Asn | Arg | Val | Ala | Leu | Lys | Gly | Asn | Ile | Glu | Thr | Asn | His | Asn |
| 145 | | | | 150 | | | | | 155 | | | | | 160 | |
| Leu | Pro | Pro | Ser | His | Lys | Ser | Arg | Asn | Asn | Ile | Leu | Arg | Thr | Ser | Leu |
| | | | 165 | | | | | 170 | | | | | | 175 | |
| Asp | Leu | Tyr | Ala | Asn | Val | Ile | His | Cys | Lys | Ser | Leu | Pro | Gly | Val | Val |
| | 180 | | | | | | | 185 | | | | | 190 | | |
| Thr | Arg | His | Lys | Asp | Ile | Asp | Ile | Leu | Ile | Val | Arg | Glu | Asn | Thr | Glu |
| | 195 | | | | | 200 | | | | | | 205 | | | |
| Gly | Glu | Tyr | Ser | Ser | Leu | Glu | His | Glu | Ser | Val | Ala | Gly | Val | Val | Glu |
| | 210 | | | | | 215 | | | | | 220 | | | | |
| Ser | Leu | Lys | Ile | Ile | Thr | Lys | Ala | Lys | Ser | Leu | Arg | Ile | Ala | Glu | Tyr |
| 225 | | | | | 230 | | | | | 235 | | | | 240 | |
| Ala | Phe | Lys | Leu | Ala | Gln | Glu | Ser | Gly | Arg | Lys | Lys | Val | Thr | Ala | Val |
| | | | 245 | | | | | 250 | | | | | 255 | | |
| His | Lys | Ala | Asn | Ile | Met | Lys | Leu | Gly | Asp | Gly | Leu | Phe | Leu | Gln | Cys |
| | | 260 | | | | | | 265 | | | | | 270 | | |
| Cys | Arg | Glu | Val | Ala | Ala | Arg | Tyr | Pro | Gln | Xaa | Thr | Phe | Glu | Asn | Met |
| | 275 | | | | | 280 | | | | | | 285 | | | |
| Ile | Val | Asp | Asn | Thr | Thr | Met | Gln | Leu | Val | Xaa | Arg | Pro | Gln | Gln | Phe |
| | 290 | | | | | 295 | | | | | 300 | | | | |
| Asp | Val | Met | Val | Met | Pro | Asn | Leu | Tyr | Gly | Asn | Ile | Val | Lys | Gln | Cys |
| 305 | | | | 310 | | | | | | 315 | | | | 320 | |
| Leu | Arg | Gly | Xaa | Gly | Arg | Gly | Pro | Lys | Leu | Val | | | | | |
| | | | 325 | | | | | 330 | | | | | | | |

425

<210> 474
<211> 30
<212> PRT
<213> Homo sapiens

<400> 474
Thr Pro Ile Ser Thr Lys Asn Thr Lys Ile Ser Gln Ala Arg Trp Arg
1 5 10 15
Ala His Val Val Pro Ala Thr Arg Glu Ala Asp Ala Glu Glu
20 25 30

<210> 475
<211> 124
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (110)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 475
Thr Gln Phe Ser Leu Ser Pro Val Glu Thr Ile Tyr Thr Ile Leu Cys
1 5 10 15
Ile Asn Val Tyr Thr Leu Pro Ile Cys Ile His Ile Tyr Ile Val Tyr
20 25 30
Ile Leu Tyr Met Tyr Arg Cys Val Tyr Val His Ile Tyr Thr His Ala
35 40 45
His Asn Lys Ile Arg Cys Ser Leu Gln Ile Gln Met Leu Ile Thr Lys
50 55 60
Pro Asp Ala Thr Gln Thr Ala Ala Glu Glu Thr Arg Leu Asp Ser Cys
65 70 75 80
Asn Arg Ser Gln Lys Ile Lys Thr Ala Thr Cys Ser Asp Phe Gly His
85 90 95
Phe Cys Met Phe Ile Lys Asn Gly Phe Val Thr Arg Lys Xaa Arg Thr
100 105 110
Ser Val Ser Glu Lys Gly Arg Trp Gly Glu Pro Ser
115 120

426

<210> 476

<211> 64

<212> PRT

<213> Homo sapiens

<400> 476

Asn Gly Tyr Leu Val Phe Pro Arg Lys Asn Ser Phe Leu Leu Ile Phe
1 5 10 15

Gly Leu Phe Val Tyr Leu Glu Thr Asn Leu Asp Ser Leu Pro Leu Val
20 25 30

Asp Thr His Ser Lys Arg Thr Leu Leu Ile Lys Thr Val Glu Thr Arg
35 40 45

Asp Gly Gln Val Ile Asn Glu Thr Ser Gln His His Asp Asp Leu Glu
50 55 60

<210> 477

<211> 107

<212> PRT

<213> Homo sapiens

<400> 477

Val Leu Thr Val Asp Ala Arg Asn His Gly Asp Ser Pro His Ser Pro
1 5 10 15

Asp Met Ser Tyr Glu Ile Met Ser Gln Asp Leu Gln Asp Leu Leu Pro
20 25 30

Gln Leu Gly Leu Val Pro Cys Val Val Val Gly His Ser Met Gly Gly
35 40 45

Lys Thr Ala Met Leu Leu Ala Leu Gln Arg Pro Glu Leu Val Glu Arg
50 55 60

Leu Ile Ala Val Asp Ile Ser Pro Val Glu Ser Thr Gly Val Ser His
65 70 75 80

Phe Ala Thr Tyr Val Ala Ala Met Arg Ala Ile Asn Ile Ala Asp Arg
85 90 95

Leu Ala Pro Leu Pro Cys Pro Lys Thr Gly Gly
100 105

427

<210> 478

<211> 282

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (281)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 478

Arg Glu Leu Gly Gly Thr Leu Leu Ser Ala Ile Glu Val Glu Gly Ala
 1 5 10 15

Lys Met Gln Ser Asn Lys Thr Phe Asn Leu Glu Lys Gln Asn His Thr
 20 25 30

Pro Arg Lys His His Gln His His His Gln Gln Gln His His Gln Gln
 35 40 45

Gln Gln Gln Gln Pro Pro Pro Pro Pro Ile Pro Ala Asn Gly Gln Gln
 50 55 60

Ala Ser Ser Gln Asn Glu Gly Leu Thr Ile Asp Leu Lys Asn Phe Arg
 65 70 75 80

Lys Pro Gly Glu Lys Thr Phe Thr Gln Arg Ser Arg Leu Phe Val Gly
 85 90 95

Asn Leu Pro Pro Asp Ile Thr Glu Glu Glu Met Arg Lys Leu Phe Glu
 100 105 110

Lys Tyr Gly Lys Ala Gly Glu Val Phe Ile His Lys Asp Lys Gly Phe
 115 120 125

Gly Phe Ile Arg Leu Glu Thr Arg Thr Leu Ala Glu Ile Ala Lys Val
 130 135 140

Glu Leu Asp Asn Met Pro Leu Arg Gly Lys Gln Leu Arg Val Arg Phe
 145 150 155 160

Ala Cys His Ser Ala Ser Leu Thr Val Arg Asn Leu Pro Gln Tyr Val
 165 170 175

Ser Asn Glu Leu Leu Glu Glu Ala Phe Ser Val Phe Gly Gln Val Glu
 180 185 190

Arg Ala Val Val Ile Val Asp Asp Arg Gly Arg Pro Ser Gly Lys Gly
 195 200 205

428

Ile Val Glu Phe Ser Gly Lys Pro Ala Ala Arg Lys Ala Leu Asp Arg
 210 215 220

Cys Ser Glu Gly Ser Phe Leu Leu Thr Thr Phe Pro Arg Pro Val Thr
 225 230 235 240

Val Glu Pro Met Asp Gln Leu Asp Asp Glu Glu Gly Leu Pro Glu Lys
 245 250 255

Leu Val Ile Lys Asn Gln Gln Phe His Lys Glu Arg Glu Gln Pro Pro
 260 265 270

Arg Phe Ala Gln Pro Gly Ser Phe Xaa Val
 275 280

<210> 479

<211> 289

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (206)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (215)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (218)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (285)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 479

Ala Val Pro Val Arg Asn Ser Arg Val Asp Pro Arg Val Arg Val Cys
 1 5 10 15

Gly Pro Leu Ser Ala Pro Arg Gly Ser Arg Arg Pro Thr Val Pro Gly
 20 25 30

Thr Pro Ala Cys Leu Ala Arg Pro Ala Ala Gln Gly Phe Ser Ala Ala

| | | |
|---|-----|---------|
| 35 | 40 | 45 |
| Leu Pro Val Arg Trp Thr Gly Arg Arg Ala Gly Pro Ser Arg Pro Val | | |
| 50 | 55 | 60 |
| Pro Ile Gly Thr Pro Ser Arg Ala Ala Asp Pro Ser Gln Gly Glu Met | | |
| 65 | 70 | 75 80 |
| Ser Ala Asp Ala Ala Ala Gly Ala Pro Leu Pro Arg Leu Cys Cys Leu | | |
| 85 | 90 | 95 |
| Glu Lys Gly Pro Asn Gly Tyr Gly Phe His Leu His Gly Glu Lys Gly | | |
| 100 | 105 | 110 |
| Lys Leu Gly Gln Tyr Ile Arg Leu Val Glu Pro Gly Ser Pro Ala Glu | | |
| 115 | 120 | 125 |
| Lys Ala Gly Leu Leu Ala Gly Asp Arg Leu Val Glu Val Asn Gly Glu | | |
| 130 | 135 | 140 |
| Asn Val Glu Lys Glu Thr His Gln Gln Val Val Ser Arg Ile Arg Ala | | |
| 145 | 150 | 155 160 |
| Ala Leu Asn Ala Val Arg Leu Leu Val Val Asp Pro Glu Thr Asp Glu | | |
| 165 | 170 | 175 |
| Gln Leu Gln Lys Leu Gly Val Gln Val Arg Glu Glu Leu Leu Arg Ala | | |
| 180 | 185 | 190 |
| Gln Glu Ala Pro Gly Gln Ala Glu Pro Pro Ala Ala Ala Xaa Val Gln | | |
| 195 | 200 | 205 |
| Gly Ala Gly Asn Glu Asn Xaa Pro Arg Xaa Ala Asp Lys Ser His Pro | | |
| 210 | 215 | 220 |
| Glu Gln Arg Glu Leu Arg Pro Arg Leu Cys Thr Met Lys Lys Gly Pro | | |
| 225 | 230 | 235 240 |
| Ser Gly Tyr Gly Phe Asn Leu His Ser Asp Lys Ser Lys Pro Gly Gln | | |
| 245 | 250 | 255 |
| Phe Ile Arg Ser Val Asp Pro Asp Ser Pro Ala Glu Ala Ser Gly Leu | | |
| 260 | 265 | 270 |
| Arg Ala Gln Asp Arg Ile Val Glu Val Met Leu Leu Xaa Ser Leu Pro | | |
| 275 | 280 | 285 |

Ile

430

<210> 480

<211> 44

<212> PRT

<213> Homo sapiens

<400> 480

Gly Ser Thr His Ala Ser Gly Arg Asn Glu Gly Pro Pro Ala Lys Thr
1 5 10 15

Lys Ser Trp Val Gly Pro Thr Leu His Phe His Arg Lys Ser Glu His
20 25 30

Leu Val Gly Leu Lys Val Leu Cys Cys Phe Arg Leu
35 40

<210> 481

<211> 124

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (5)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (8)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (9)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (10)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 481

Ser Ile Xaa His Xaa Arg Lys Xaa Xaa Xaa Thr Val Arg Ser Asp Ser
1 5 10 15

431

Arg Val Asp Pro Arg Ser Asp Asp Phe Thr Pro Leu Glu Ile Leu Trp
 20 25 30
 Thr Phe Ser Ile Tyr Leu Glu Ser Val Ala Ile Leu Pro Gln Leu Phe
 35 40 45
 Met Val Ser Lys Thr Gly Glu Ala Glu Thr Ile Thr Ser His Tyr Leu
 50 55 60
 Phe Ala Leu Gly Val Tyr Arg Thr Leu Tyr Leu Phe Asn Trp Ile Trp
 65 70 75 80
 Arg Tyr His Phe Glu Gly Phe Phe Asp Leu Ile Ala Ile Val Ala Gly
 85 90 95
 Leu Val Gln Thr Val Leu Tyr Cys Asp Phe Phe Tyr Leu Tyr Ile Thr
 100 105 110
 Lys Val Leu Lys Gly Lys Lys Leu Ser Leu Pro Ala
 115 120

<210> 482

<211> 131

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (122)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (124)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (127)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (131)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 482

Cys Ser Ser Arg Gly Ala His His Ser His Cys Asp Arg Leu Pro His

432

1 5 10 15
 Ser Pro Trp Pro Gly Leu Arg Glu Val Glu Leu Leu Ala Ser Val His
 20 25 30
 Thr Glu Gln Met Glu Glu Glu Leu Ala Leu Gly Pro Arg Gly Gln Gly
 35 40 45
 Gly Ala Ser Leu Ala Gly Arg Asp Gly Arg Ser Ala Gly Ala Gly Ser
 50 55 60
 Tyr Gly Ala Leu Ala Asn Ser Ala Trp Gly Gly Pro Arg Lys Val Ala
 65 70 75 80
 Ser Ala Ser Ala Ala Ala Ser Thr Leu Ser Glu Pro Pro Arg Arg Thr
 85 90 95
 Gln Glu Ser Arg Thr Arg Thr Arg Ala Leu Gly Leu Pro Thr Leu Pro
 100 105 110
 Met Glu Lys Leu Ala Ala Ser Asn Arg Xaa Pro Xaa Gly Leu Xaa Gly
 115 120 125
 Pro Gly Xaa
 130

<210> 483

<211> 221

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (168)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (174)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 483

Lys Lys Pro Pro Ile Thr His Pro Ser Thr Pro Ala Glu Glu Thr Tyr
 1 5 10 15

Asn Leu Gly Arg Gln Val Leu Pro Leu Ser Ala Val Thr Tyr Phe Gln
 20 25 30

Lys Ser Gly Pro Gly Leu Leu Pro Ala Pro Ala Thr Gln Ser Ala Ser

433

| | | |
|---|-----|-----|
| 35 | 40 | 45 |
| Val Ala Gly Thr Leu Gln Asn Ser Leu Cys Ser Gln Val Thr Lys Lys | | |
| 50 | 55 | 60 |
| Lys Arg Ala Asn Met Leu Val Leu Leu Ala Gly Ile Phe Val Val His | | |
| 65 | 70 | 75 |
| Ile Ala Thr Val Ile Met Leu Phe Val Ser Thr Ile Ala Asn Val Trp | | |
| 85 | 90 | 95 |
| Leu Val Ser Asn Thr Val Asp Ala Ser Val Gly Leu Trp Lys Asn Cys | | |
| 100 | 105 | 110 |
| Thr Asn Ile Ser Cys Ser Asp Ser Leu Ser Tyr Ala Ser Glu Asp Ala | | |
| 115 | 120 | 125 |
| Leu Lys Thr Val Gln Ala Phe Met Ile Leu Ser Ile Ile Phe Cys Val | | |
| 130 | 135 | 140 |
| Ile Ala Leu Leu Val Phe Val Phe Gln Leu Phe Thr Met Glu Lys Gly | | |
| 145 | 150 | 155 |
| Asn Arg Phe Phe Leu Ser Gly Xaa Thr Thr Leu Val Cys Xaa Leu Cys | | |
| 165 | 170 | 175 |
| Ile Leu Val Gly Cys Pro Ser Thr Leu Val Ile Met Arg Ile Val Met | | |
| 180 | 185 | 190 |
| Glu Arg Ile Cys Thr Thr Ala Ile Pro Thr Ser Trp Ala Gly Ser Ala | | |
| 195 | 200 | 205 |
| Ser Ala Ser Ala Ser Ser Ser Ala Phe Ser Ile Trp Ser | | |
| 210 | 215 | 220 |

<210> 484

<211> 382

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (22)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (54)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (69)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (287)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (298)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (324)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (358)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 484
 Thr Lys Leu Trp Thr Leu Val Ser Asn Pro Asp Thr Asp Ala Leu Ile
 1 5 10 15
 Cys Trp Ser Pro Ser Xaa Asn Ser Phe His Val Phe Asp Gln Gly Gln
 20 25 30
 Phe Ala Lys Glu Val Leu Pro Lys Tyr Phe Lys His Asn Asn Met Ala
 35 40 45
 Ser Phe Val Arg Gln Xaa Asn Met Tyr Gly Phe Arg Lys Val Val His
 50 55 60
 Ile Glu Gln Gly Xaa Leu Val Lys Pro Glu Arg Asp Asp Thr Glu Phe
 65 70 75 80
 Gln His Pro Cys Phe Leu Arg Gly Gln Glu Gln Leu Leu Glu Asn Ile
 85 90 95
 Lys Arg Lys Val Thr Ser Val Ser Thr Leu Lys Ser Glu Asp Ile Lys
 100 105 110
 Ile Arg Gln Asp Ser Val Thr Lys Leu Leu Thr Asp Val Gln Leu Met
 115 120 125

435

Lys Gly Lys Gln Glu Cys Met Asp Ser Lys Leu Leu Ala Met Lys His
 130 135 140
 Glu Asn Glu Ala Leu Trp Arg Glu Val Ala Ser Leu Arg Gln Lys His
 145 150 155 160
 Ala Gln Gln Gln Lys Val Val Asn Lys Leu Ile Gln Phe Leu Ile Ser
 165 170 175
 Leu Val Gln Ser Asn Arg Ile Leu Gly Val Lys Arg Lys Ile Pro Leu
 180 185 190
 Met Leu Asn Asp Ser Gly Ser Ala His Ser Met Pro Lys Tyr Ser Arg
 195 200 205
 Gln Phe Ser Leu Glu His Val His Gly Ser Gly Pro Tyr Ser Ala Pro
 210 215 220
 Ser Pro Ala Tyr Ser Ser Ser Ser Leu Tyr Ala Pro Asp Ala Val Ala
 225 230 235 240
 Ser Ser Gly Pro Ile Ile Ser Asp Ile Thr Glu Leu Ala Pro Ala Ser
 245 250 255
 Pro Met Ala Ser Pro Gly Gly Ser Ile Asp Glu Arg Pro Leu Ser Ser
 260 265 270
 Ser Pro Leu Val Arg Val Lys Glu Glu Pro Pro Ser Pro Pro Xaa Ser
 275 280 285
 Pro Arg Val Glu Glu Ala Ser Pro Gly Xaa Pro Ser Ser Val Asp Thr
 290 295 300
 Leu Leu Ser Pro Thr Ala Leu Ile Asp Ser Ile Leu Arg Glu Ser Glu
 305 310 315 320
 Pro Ala Pro Xaa Ser Val Thr Ala Leu Thr Asp Ala Arg Gly His Thr
 325 330 335
 Asp Thr Glu Gly Arg Pro Pro Ser Pro Pro Pro Thr Ser Thr Pro Glu
 340 345 350
 Lys Cys Leu Ser Val Xaa Ala Trp Thr Arg Met Ser Ser Val Thr Thr
 355 360 365
 Trp Met Leu Trp Thr Pro Thr Trp Ile Thr Cys Arg Pro Cys
 370 375 380

<210> 485

436

<211> 416

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (399)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 485

Pro Ser Val Ala Asn Val Gly Ser His Cys Asp Leu Ser Leu Lys Ile
 1 5 10 15
 Pro Glu Ile Ser Ile Gln Asp Met Thr Ala Gln Val Thr Ser Pro Ser
 20 25 30
 Gly Lys Thr His Glu Ala Glu Ile Val Glu Gly Glu Asn His Thr Tyr
 35 40 45
 Cys Ile Arg Phe Val Pro Ala Glu Met Gly Thr His Thr Val Ser Val
 50 55 60
 Lys Tyr Lys Gly Gln His Val Pro Gly Ser Pro Phe Gln Phe Thr Val
 65 70 75 80
 Gly Pro Leu Gly Glu Gly Gly Ala His Lys Val Arg Ala Gly Gly Pro
 85 90 95
 Gly Leu Glu Arg Ala Glu Ala Gly Val Pro Ala Glu Phe Ser Ile Trp
 100 105 110
 Thr Arg Glu Ala Gly Ala Gly Gly Leu Ala Ile Ala Val Glu Gly Pro
 115 120 125
 Ser Lys Ala Glu Ile Ser Phe Glu Asp Arg Lys Asp Gly Ser Cys Gly
 130 135 140
 Val Ala Tyr Val Val Gln Glu Pro Gly Asp Tyr Glu Val Ser Val Lys
 145 150 155 160
 Phe Asn Glu Glu His Ile Pro Asp Ser Pro Phe Val Val Pro Val Ala
 165 170 175
 Ser Pro Ser Gly Asp Ala Arg Arg Leu Thr Val Ser Ser Leu Gln Glu
 180 185 190
 Ser Gly Leu Lys Val Asn Gln Pro Ala Ser Phe Ala Val Ser Leu Asn
 195 200 205
 Gly Ala Lys Gly Ala Ile Asp Ala Lys Val His Ser Pro Ser Gly Ala
 210 215 220

437

Leu Glu Glu Cys Tyr Val Thr Glu Ile Asp Gln Asp Lys Tyr Ala Val
 225 230 235 240
 Arg Phe Ile Pro Arg Glu Asn Gly Val Tyr Leu Ile Asp Val Lys Phe
 245 250 255
 Asn Gly Thr His Ile Pro Gly Ser Pro Phe Lys Ile Arg Val Gly Glu
 260 265 270
 Pro Gly His Gly Gly Asp Pro Gly Leu Val Ser Ala Tyr Gly Ala Gly
 275 280 285
 Leu Glu Gly Gly Val Thr Gly Asn Pro Ala Glu Phe Val Val Asn Thr
 290 295 300
 Ser Asn Ala Gly Ala Gly Ala Leu Ser Val Thr Ile Asp Gly Pro Ser
 305 310 315 320
 Lys Val Lys Met Asp Cys Gln Glu Cys Pro Glu Gly Tyr Arg Val Thr
 325 330 335
 Tyr Thr Pro Met Ala Pro Gly Ser Tyr Leu Ile Ser Ile Lys Tyr Gly
 340 345 350
 Gly Pro Tyr His Ile Gly Gly Ser Pro Phe Lys Ala Lys Val Thr Gly
 355 360 365
 Pro Arg Leu Val Ser Asn His Ser Leu His Glu Thr Ser Ser Val Phe
 370 375 380
 Val Asp Ser Leu Thr Lys Ala Thr Cys Ala Pro Gln His Gly Xaa Pro
 385 390 395 400
 Gly Pro Gly Pro Ala Asp Ala Ser Lys Val Val Ala Lys Gly Trp Gly
 405 410 415

<210> 486

<211> 46

<212> PRT

<213> Homo sapiens

<400> 486

Phe Val Thr Ser Gly Lys Ile Ser Leu Tyr Val Tyr Ile Leu Thr Ile
 1 5 10 15

438

Arg Leu Asp Thr Asn Lys Ala Thr Leu Leu Thr Ala Ser Gly Glu Leu
 20 25 30

Ile Leu Phe Leu Ile Phe Phe Asn Lys Asp Ile Leu Arg Tyr
 35 40 45

<210> 487

<211> 162

<212> PRT

<213> Homo sapiens

<400> 487

Leu Gly Val Ala Leu Gly Ala Val Pro Lys Leu His Leu Gly Val Leu
 1 5 10 15

Val Ser Thr Gly Leu Arg Thr Ala Val Gly Ser Pro Arg Leu Pro Pro
 20 25 30

Thr Ala Leu Gly Ala Ala Tyr Gly Thr Ala Lys Ser Gly Thr Gly Ile
 35 40 45

Ala Ala Met Ser Val Met Arg Pro Glu Gln Ile Met Lys Ser Ile Ile
 50 55 60

Pro Val Val Met Ala Gly Ile Ile Ala Ile Tyr Gly Leu Val Val Ala
 65 70 75 80

Val Leu Ile Ala Asn Ser Leu Asn Asp Asp Ile Ser Leu Tyr Lys Ser
 85 90 95

Phe Leu Gln Leu Gly Ala Gly Leu Ser Val Gly Leu Ser Gly Leu Ala
 100 105 110

Ala Gly Phe Ala Ile Gly Ile Val Gly Asp Ala Gly Val Arg Gly Thr
 115 120 125

Ala Gln Gln Pro Arg Leu Phe Val Gly Met Ile Leu Ile Leu Ile Phe
 130 135 140

Ala Glu Val Leu Gly Leu Tyr Gly Leu Ile Val Ala Leu Ile Leu Ser
 145 150 155 160

Thr Lys

<210> 488

<211> 114

439

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (95)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (111)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (113)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 488

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gln | Ala | Leu | Arg | Pro | Gly | Ser | Phe | Arg | Gly | Thr | Gly | Arg | Lys | Arg | Glu |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Glu | Arg | Glu | Arg | Met | Ser | Leu | Ser | Asp | Trp | His | Leu | Ala | Val | Lys |
| | 20 | | | | | | 25 | | | | | | 30 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Ala | Asp | Gln | Pro | Leu | Ala | Pro | Lys | Ser | Ile | Leu | Gln | Leu | Pro | Glu |
| | 35 | | | | | 40 | | | | | | 45 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Glu | Leu | Gly | Glu | Tyr | Ser | Leu | Gly | Gly | Tyr | Ser | Ile | Ser | Phe | Leu |
| | 50 | | | | | 55 | | | | | 60 | | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Gln | Leu | Ile | Ala | Gly | Lys | Leu | Gln | Glu | Ser | Val | Pro | Asp | Pro | Glu |
| 65 | | | | | 70 | | | | | 75 | | | | 80 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Ile | Asp | Leu | Ile | Tyr | Cys | Gly | Arg | Lys | Leu | Lys | Asp | Asp | Xaa | Thr |
| | | | 85 | | | | | | 90 | | | | | 95 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Thr | Ser | Thr | Val | Phe | Asn | Leu | Ala | Pro | His | Pro | Cys | Ser | Xaa | Glu |
| | | | 100 | | | | | 105 | | | | | | 110 | |

Xaa Leu

<210> 489

<211> 149

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (121)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (142)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 489

Ser Thr His Ala Ser Glu Asp Val Leu Ala Ala Pro Ser Gly Cys Arg
1 5 10 15

Ala Ser Arg Pro Pro Thr Ser Gly Arg Glu Gln Phe Trp Ala Arg Gly
20 25 30

Leu Ala Ala Ala Asp Met Thr Lys Gly Leu Val Leu Gly Ile Tyr Ser
35 40 45

Lys Asp Lys Glu Asp Asp Val Pro Gln Phe Thr Ser Ala Gly Glu Asn
50 55 60

Phe Asp Lys Leu Val Ser Gly Lys Leu Arg Glu Ile Leu Asn Ile Ser
65 70 75 80

Gly Pro Pro Leu Lys Ala Gly Lys Thr Arg Thr Phe Tyr Gly Leu His
85 90 95

Glu Asp Phe Pro Ser Val Val Val Val Gly Leu Gly Arg Lys Ala Ala
100 105 110

Gly Val Asp Asp Gln Glu Asn Trp Xaa Glu Gly Lys Glu Asn Ile Arg
115 120 125

Val Ala Met Gln Arg Gly Ala Gly Arg Phe Gln Asp Leu Xaa Ile Ser
130 135 140

Ser Val Glu Gly Gly
145

<210> 490

<211> 527

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (311)

<223> Xaa equals any of the naturally occurring L-amino acids

441

<400> 490

Arg Arg Arg Ser Arg Gly Leu Ile Pro Gly Arg Ala Pro Gly Arg Arg
 1 5 10 15

Arg Pro Arg Ala His Glu Val Ala Arg Ala Pro Pro Pro Ile Ala Met
 20 25 30

Asp Arg Met Lys Lys Ile Lys Arg Gln Leu Ser Met Thr Leu Arg Gly
 35 40 45

Gly Arg Gly Ile Asp Lys Thr Asn Gly Ala Pro Glu Gln Ile Gly Leu
 50 55 60

Asp Glu Ser Gly Gly Gly Gly Gly Ser Asp Pro Gly Glu Ala Pro Thr
 65 70 75 80

Arg Ala Ala Pro Gly Glu Leu Arg Ser Ala Arg Gly Pro Leu Ser Ser
 85 90 95

Ala Pro Glu Ile Val His Glu Asp Leu Lys Met Gly Ser Asp Gly Glu
 100 105 110

Ser Asp Gln Ala Ser Ala Thr Ser Ser Asp Glu Val Gln Ser Pro Val
 115 120 125

Arg Val Arg Met Arg Asn His Pro Pro Arg Lys Ile Ser Thr Glu Asp
 130 135 140

Ile Asn Lys Arg Leu Ser Leu Pro Ala Asp Ile Arg Leu Pro Glu Gly
 145 150 155 160

Tyr Leu Glu Lys Leu Thr Leu Asn Ser Pro Ile Phe Asp Lys Pro Leu
 165 170 175

Ser Arg Arg Leu Arg Arg Val Ser Leu Ser Glu Ile Gly Phe Gly Lys
 180 185 190

Leu Glu Thr Tyr Ile Lys Leu Asp Lys Leu Gly Glu Gly Thr Tyr Ala
 195 200 205

Thr Val Tyr Lys Gly Lys Ser Lys Leu Thr Asp Asn Leu Val Ala Leu
 210 215 220

Lys Glu Ile Arg Leu Glu His Glu Glu Gly Ala Pro Cys Thr Ala Ile
 225 230 235 240

Arg Glu Val Ser Leu Leu Lys Asp Leu Lys His Ala Asn Ile Val Thr
 245 250 255

Leu His Asp Ile Ile His Thr Glu Lys Ser Leu Thr Leu Val Phe Glu

442

| 260 | 265 | 270 |
|--|-----|-----|
| Tyr Leu Asp Lys Asp Leu Lys Gln Tyr Leu Asp Asp Cys Gly Asn Ile 275 280 285 | | |
| Ile Asn Met His Asn Val Lys Leu Phe Leu Phe Gln Leu Leu Arg Gly 290 295 300 | | |
| Leu Ala Tyr Cys His Arg Xaa Lys Val Leu His Arg Asp Leu Lys Pro 305 310 315 320 | | |
| Gln Asn Leu Leu Ile Asn Glu Arg Gly Glu Leu Lys Leu Ala Asp Phe 325 330 335 | | |
| Gly Leu Ala Arg Ala Lys Ser Ile Pro Thr Lys Thr Tyr Ser Asn Glu 340 345 350 | | |
| Val Val Thr Leu Trp Tyr Arg Pro Pro Asp Ile Leu Leu Gly Ser Thr 355 360 365 | | |
| Asp Tyr Ser Thr Gln Ile Asp Met Trp Gly Val Gly Cys Ile Phe Tyr 370 375 380 | | |
| Glu Met Ala Thr Gly Arg Pro Leu Phe Pro Gly Ser Thr Val Glu Glu 385 390 395 400 | | |
| Gln Leu His Phe Ile Phe Arg Ile Leu Gly Thr Pro Thr Glu Glu Thr 405 410 415 | | |
| Trp Pro Gly Ile Leu Ser Asn Glu Glu Phe Lys Thr Tyr Asn Tyr Pro 420 425 430 | | |
| Lys Tyr Arg Ala Glu Ala Leu Leu Ser His Ala Pro Arg Leu Asp Ser 435 440 445 | | |
| Asp Gly Ala Asp Leu Leu Thr Lys Leu Leu Gln Phe Glu Gly Arg Asn 450 455 460 | | |
| Arg Ile Ser Ala Glu Asp Ala Met Lys His Pro Phe Phe Leu Ser Leu 465 470 475 480 | | |
| Gly Glu Arg Ile His Lys Leu Pro Asp Thr Thr Ser Ile Phe Ala Leu 485 490 495 | | |
| Lys Glu Ile Gln Leu Gln Lys Glu Ala Ser Leu Arg Ser Ser Ser Met 500 505 510 | | |
| Pro Asp Ser Gly Arg Pro Ala Phe Arg Val Val Asp Thr Glu Phe 515 520 525 | | |

443

<210> 491

<211> 125

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (125)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 491

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Thr | Arg | Ala | His | Pro | Lys | Asn | Leu | Val | Glu | Lys | Gly | Ile | Leu | Thr |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Glu | Lys | Gln | Asn | Phe | Leu | Leu | Phe | Asp | Met | Thr | Thr | His | Pro | Val |
| | | | 20 | | | | | 25 | | | | | 30 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Asn | Thr | Thr | Glu | Lys | Gln | Arg | Leu | Val | Lys | Lys | Leu | Gln | Asp | Ser |
| | | 35 | | | | | 40 | | | | | 45 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Leu | Glu | Arg | Trp | Val | Asn | Asp | Pro | Gln | Arg | Met | Asp | Lys | Arg | Thr |
| | 50 | | | | | 55 | | | | | 60 | | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Ala | Leu | Leu | Val | Leu | Ala | His | Ser | Ser | Asp | Val | Leu | Glu | Asn | Val |
| 65 | | | | | 70 | | | | | 75 | | | | 80 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Ser | Ser | Leu | Thr | Asp | Asp | Lys | Tyr | Asp | Val | Ala | Met | Asn | Arg | Ala |
| | | | | 85 | | | | | 90 | | | | | 95 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Asp | Leu | Val | Glu | Leu | Asp | Pro | Glu | Val | Glu | Gly | Thr | Lys | Pro | Ser |
| | | 100 | | | | | 105 | | | | | | 110 | | |

| | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Thr | Glu | Met | Ile | Trp | Ala | Val | Leu | Ala | Ala | Phe | Xaa |
| | | 115 | | | | 120 | | | | | | 125 |

<210> 492

<211> 53

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (49)

444

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (51)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 492

Val Ser Xaa Ser Ile Leu Ala Leu Leu Phe Asn Thr Asp Ala Leu Phe
1 5 10 15

Ser Arg Val Tyr Glu Ser Leu Ser Asp Asn His Gly Leu Gln Glu Gln
20 25 30

Thr Val Glu Lys Leu Phe Phe Gln Trp Lys Ser Trp Val Gln Glu Met
35 40 45

Xaa Gly Xaa Leu Lys
50

<210> 493

<211> 82

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (60)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (67)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (68)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (78)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (79)

<223> Xaa equals any of the naturally occurring L-amino acids

445

<400> 493

Pro Gly Phe Phe Phe Gln Met Leu Val His Thr Tyr Ser Ser Met Asp
 1 5 10 15

Arg His Asp Gly Val Pro Ser His Ser Ser Arg Leu Ser Gln Leu Gly
 20 25 30

Ser Val Ser Gln Gly Pro Tyr Ser Ser Ala Pro Pro Leu Ser His Thr
 35 40 45

Pro Ser Ser Asp Phe Gln Pro Pro Tyr Phe Pro Xaa Pro Tyr Gln Pro
 50 55 60

Leu Pro Xaa Xaa Gln Ser Gln Asp Pro Tyr Ser His Val Xaa Xaa Pro
 65 70 75 80

Tyr Pro

<210> 494

<211> 290

<212> PRT

<213> Homo sapiens

<400> 494

Tyr Lys Asp Trp Leu Thr Lys Met Ser Gly Lys His Asp Val Gly Ala
 1 5 10 15

Tyr Met Leu Met Tyr Lys Gly Ala Asn Arg Thr Glu Thr Val Thr Ser
 20 25 30

Phe Arg Lys Arg Glu Ser Lys Val Pro Ala Asp Leu Leu Lys Arg Ala
 35 40 45

Phe Val Arg Met Ser Thr Ser Pro Glu Ala Phe Leu Ala Leu Arg Ser
 50 55 60

His Phe Ala Ser Ser His Ala Leu Ile Cys Ile Ser His Trp Ile Leu
 65 70 75 80

Gly Ile Gly Asp Arg His Leu Asn Asn Phe Met Val Ala Met Glu Thr
 85 90 95

Gly Gly Val Ile Gly Ile Asp Phe Gly His Ala Phe Gly Ser Ala Thr
 100 105 110

Gln Phe Leu Pro Val Pro Glu Leu Met Pro Phe Arg Leu Thr Arg Gln
 115 120 125

446

Phe Ile Asn Leu Met Leu Pro Met Lys Glu Thr Gly Leu Met Tyr Ser
 130 135 140
 Ile Met Val His Ala Leu Arg Ala Phe Arg Ser Asp Pro Gly Leu Leu
 145 150 155 160
 Thr Asn Thr Met Asp Val Phe Val Lys Glu Pro Ser Phe Asp Trp Lys
 165 170 175
 Asn Phe Glu Gln Lys Met Leu Lys Lys Gly Gly Ser Trp Ile Gln Glu
 180 185 190
 Ile Asn Val Ala Glu Lys Asn Trp Tyr Pro Arg Gln Lys Ile Cys Tyr
 195 200 205
 Ala Lys Arg Lys Leu Ala Gly Ala Asn Pro Ala Val Ile Thr Cys Asp
 210 215 220
 Glu Leu Leu Leu Gly His Glu Lys Ala Pro Ala Phe Arg Asp Tyr Val
 225 230 235 240
 Ala Val Ala Arg Gly Ser Lys Asp His Asn Ile Arg Ala Gln Glu Pro
 245 250 255
 Glu Ser Gly Leu Ser Glu Glu Thr Gln Val Lys Cys Leu Met Asp Gln
 260 265 270
 Ala Thr Asp Pro Asn Ile Leu Gly Arg Thr Trp Glu Gly Trp Glu Pro
 275 280 285
 Trp Met
 290

<210> 495

<211> 156

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (148)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 495

Cys Gln Ser His Pro Leu Pro Gly Gly Pro Ala Cys Pro Cys Leu Ala
 1 5 10 15

Cys His Ile Thr Leu Leu Phe Gly Arg Pro Trp Leu Ile Lys Glu Val

447

20 25 30
 Leu Val Val Ser Gln Ala Lys Trp Asn Leu Glu Thr Val Lys Lys Val
 35 40 45
 Gln Ile Thr Leu Asn Cys Ile Gln Glu Val His Phe Phe Pro Ile Val
 50 55 60
 Arg Gly Ser Trp Ser Leu Arg Asp Ala Arg Leu Glu Ser Asp Tyr Ile
 65 70 75 80
 Ile Ile Gln Asn Gly Asn Ser Gln Gly Asn Ala Phe Phe His Phe Ile
 85 90 95
 Arg Phe Phe Tyr Pro His Cys Thr Pro Ser Pro Ser Pro Leu Pro Ile
 100 105 110
 Trp Met Ala Ser Gln Lys Leu Gly Pro Ser Pro Pro Cys Leu Gly Gly
 115 120 125
 Gly Gln Ser Pro Leu Thr Ala Glu Ala Ala Leu Leu Ser Ser Ala Val
 130 135 140
 Leu Pro Leu Xaa Lys Cys Leu Gln Arg Val Met Ser
 145 150 155

<210> 496

<211> 251

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (42)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 496

Glu Glu Leu Leu Arg Ala Gln Glu Ala Pro Gly Gln Ala Glu Pro Pro
 1 5 10 15

Ala Ala Ala Glu Val Gln Gly Ala Gly Asn Glu Asn Glu Pro Arg Glu
 20 25 30

Ala Asp Lys Ser His Pro Glu Gln Arg Xaa Leu Arg Pro Arg Leu Cys
 35 40 45

Thr Met Lys Lys Gly Pro Ser Gly Tyr Gly Phe Asn Leu His Ser Asp
 50 55 60

448

Lys Ser Lys Pro Gly Gln Phe Ile Arg Ser Val Asp Pro Asp Ser Pro
 65 70 75 80
 Ala Glu Ala Ser Gly Leu Arg Ala Gln Asp Arg Ile Val Glu Val Asn
 85 90 95
 Gly Val Cys Met Glu Gly Lys Gln His Gly Asp Val Val Ser Ala Ile
 100 105 110
 Arg Ala Gly Gly Asp Glu Thr Lys Leu Leu Val Val Asp Arg Glu Thr
 115 120 125
 Asp Glu Phe Phe Lys Lys Cys Arg Val Ile Pro Ser Gln Glu His Leu
 130 135 140
 Asn Gly Pro Leu Pro Val Pro Phe Thr Asn Gly Glu Ile Gln Lys Glu
 145 150 155 160
 Asn Ser Arg Glu Ala Leu Ala Glu Ala Ala Leu Glu Ser Pro Arg Pro
 165 170 175
 Ala Leu Val Arg Ser Ala Ser Ser Asp Thr Ser Glu Glu Leu Asn Ser
 180 185 190
 Gln Asp Ser Pro Pro Lys Gln Asp Ser Thr Ala Pro Ser Ser Thr Ser
 195 200 205
 Ser Ser Asp Pro Ile Leu Asp Phe Asn Ile Ser Leu Ala Met Ala Lys
 210 215 220
 Glu Arg Ala His Gln Lys Arg Ser Ser Lys Arg Ala Pro Gln Met Asp
 225 230 235 240
 Trp Ser Lys Lys Asn Glu Leu Phe Ser Asn Leu
 245 250

<210> 497

<211> 48

<212> PRT

<213> Homo sapiens

<400> 497

Asn Gly Ala Glu Ala Val Ser Thr Glu Ala Lys Met Thr Ala Phe Pro
 1 5 10 15
 Asp Trp Pro Trp Leu Phe His Thr Leu Cys Asp Pro Cys Pro Met Thr
 20 25 30
 Leu Trp Leu Thr Leu Pro Glu Ala Met Thr Thr Ala Ala Phe Cys His

449

35

40

45

<210> 498

<211> 373

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (337)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (372)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 498

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Thr | Arg | Gly | Ser | Arg | Ala | Ser | Gly | Val | Cys | Ala | Arg | Gly | Cys | Leu |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asp | Ser | Ala | Gly | Pro | Trp | Thr | Met | Ser | Arg | Ala | Leu | Arg | Pro | Pro | Leu |
| | | | 20 | | | | | | 25 | | | | | 30 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pro | Pro | Leu | Cys | Phe | Phe | Leu | Leu | Leu | Leu | Ala | Ala | Ala | Gly | Ala | Arg |
| | | 35 | | | | | | 40 | | | | | | 45 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Gly | Gly | Tyr | Glu | Thr | Cys | Pro | Thr | Val | Gln | Pro | Asn | Met | Leu | Asn |
| | 50 | | | | | 55 | | | | | | 60 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | His | Leu | Leu | Pro | His | Thr | His | Asp | Asp | Val | Gly | Trp | Leu | Lys | Thr |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Asp | Gln | Tyr | Phe | Tyr | Gly | Ile | Lys | Asn | Asp | Ile | Gln | His | Ala | Gly |
| | | | | 85 | | | | | 90 | | | | | | 95 |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Gln | Tyr | Ile | Leu | Asp | Ser | Val | Ile | Ser | Ala | Leu | Leu | Ala | Asp | Pro |
| | | 100 | | | | | | 105 | | | | | | 110 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Arg | Arg | Phe | Ile | Tyr | Val | Glu | Ile | Ala | Phe | Phe | Ser | Arg | Trp | Trp |
| | | 115 | | | | | 120 | | | | | | 125 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| His | Gln | Gln | Thr | Asn | Ala | Thr | Gln | Glu | Val | Val | Arg | Asp | Leu | Val | Arg |
| | 130 | | | | | 135 | | | | | | 140 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gln | Gly | Arg | Leu | Glu | Phe | Ala | Asn | Gly | Gly | Trp | Val | Met | Asn | Asp | Glu |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|

450

```
<210> 499
<211> 238
<212> PRT
<213> Homo sapiens
```

451

<400> 499

Ala Leu Pro Gly Pro Asp Trp His Gly Ala Gly Ala Ala Asp Arg Gly
 1 5 10 15
 Pro Ala Ala Pro Pro Arg Pro Gly Pro Cys Ala Tyr Ala Ala His Gly
 20 25 30
 Arg Gly Ala Leu Ala Glu Ala Ala Arg Arg Cys Leu His Asp Ile Ala
 35 40 45
 Leu Ala His Arg Ala Ala Thr Ala Ala Arg Pro Pro Ala Pro Pro Pro
 50 55 60
 Ala Pro Gln Pro Pro Ser Pro Thr Pro Ser Pro Pro Arg Pro Thr Leu
 65 70 75 80
 Ala Arg Glu Asp Asn Glu Glu Asp Glu Asp Glu Pro Thr Glu Thr Glu
 85 90 95
 Thr Ser Gly Glu Gln Leu Gly Ile Ser Asp Asn Gly Gly Leu Phe Val
 100 105 110
 Met Asp Glu Asp Ala Thr Leu Gln Asp Leu Pro Pro Phe Cys Glu Ser
 115 120 125
 Asp Pro Glu Ser Thr Asp Asp Gly Ser Leu Ser Glu Glu Thr Pro Ala
 130 135 140
 Gly Pro Pro Thr Cys Ser Val Pro Pro Ala Ser Ala Leu Pro Thr Gln
 145 150 155 160
 Gln Tyr Ala Lys Ser Leu Pro Val Ser Val Pro Val Trp Gly Phe Lys
 165 170 175
 Glu Lys Arg Thr Glu Ala Arg Ser Ser Asp Glu Glu Asn Gly Pro Pro
 180 185 190
 Ser Ser Pro Asp Leu Asp Arg Ile Ala Ala Ser Met Arg Ala Leu Val
 195 200 205
 Leu Arg Glu Ala Glu Asp Thr Gln Val Phe Gly Asp Leu Pro Arg Pro
 210 215 220
 Arg Leu Asn Thr Ser Asp Phe Gln Lys Leu Lys Arg Lys Tyr
 225 230 235

<210> 500

<211> 198

<212> PRT

452

<213> Homo sapiens

<220>

<221> SITE

<222> (94)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (156)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 500

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Ser | Ala | Glu | Leu | Ser | Pro | Gly | Leu | Cys | Ser | Pro | Thr | Pro | Thr | Glu |
| 1 | | | | 5 | | | | | 10 | | | | | | 15 |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Arg | Ala | Gly | Asp | Ala | Gly | Pro | Ala | Ala | Arg | Ser | Arg | Lys | Gln | Asn |
| | | | 20 | | | | | 25 | | | | | 30 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pro | Gln | Ser | Pro | Pro | Cys | Cys | Cys | Val | Asp | Asp | Thr | Trp | Ala | Gln | Ala |
| | 35 | | | | | | 40 | | | | | 45 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Val | Gly | Pro | Val | Thr | Ser | Cys | Thr | Gly | Phe | Val | Glu | Gly | Ser | Ser |
| | 50 | | | | | 55 | | | | | 60 | | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Thr | Gly | Gly | Met | Gly | Ser | Ala | Cys | Ile | Lys | Val | Thr | Lys | Tyr | Phe |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Phe | Leu | Phe | Asn | Leu | Ile | Phe | Phe | Ile | Leu | Gly | Ala | Xaa | Ile | Leu |
| | | | | 85 | | | | | | 90 | | | | 95 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Phe | Gly | Val | Trp | Ile | Leu | Ala | Asp | Lys | Ser | Ser | Phe | Ile | Ser | Val |
| | | 100 | | | | | | 105 | | | | | 110 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Gln | Thr | Ser | Ser | Ser | Ser | Leu | Arg | Met | Gly | Ala | Tyr | Val | Phe | Ile |
| | 115 | | | | | | 120 | | | | | 125 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Val | Gly | Ala | Val | Thr | Met | Leu | Met | Gly | Phe | Leu | Gly | Cys | Ile | Gly |
| | 130 | | | | | 135 | | | | | 140 | | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Val | Asn | Glu | Val | Arg | Cys | Leu | Leu | Gly | Leu | Xaa | Phe | Ala | Phe | Leu |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Leu | Ile | Leu | Ile | Ala | Gln | Val | Thr | Ala | Gly | Ala | Leu | Phe | Tyr | Phe |
| | | | | 165 | | | | | 170 | | | | | 175 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Met | Gly | Lys | Val | Ser | Pro | Ser | Leu | Pro | Pro | Ser | Ser | Leu | Gly | Trp |
| | | 180 | | | | | | 185 | | | | | | 190 | |

| | | | | | |
|-----|-----|-----|-----|-----|-----|
| Thr | Asn | His | Gly | Gly | Asp |
| | | | | | 195 |

453

<210> 501
 <211> 169
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (165)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 501
 Ser Ser Ala Ser Thr Asn Met Ser Arg Gly Ser Ser Ala Gly Phe Asp
 1 5 10 15
 Arg His Ile Thr Ile Phe Ser Pro Glu Gly Arg Leu Tyr Gln Val Glu
 20 25 30
 Tyr Ala Phe Lys Ala Ile Asn Gln Gly Gly Leu Thr Ser Val Ala Val
 35 40 45
 Arg Gly Lys Asp Cys Ala Val Ile Val Thr Gln Lys Lys Val Pro Asp
 50 55 60
 Lys Leu Leu Asp Ser Ser Thr Val Thr His Leu Phe Lys Ile Thr Glu
 65 70 75 80
 Asn Ile Gly Cys Val Met Thr Gly Met Thr Ala Asp Ser Arg Ser Gln
 85 90 95
 Val Gln Arg Ala Arg Tyr Glu Ala Ala Asn Trp Lys Tyr Lys Tyr Gly
 100 105 110
 Tyr Glu Ile Pro Val Asp Met Leu Cys Lys Arg Ile Ala Asp Ile Ser
 115 120 125
 Gln Val Tyr Thr Gln Asn Ala Glu Met Arg Pro Leu Gly Cys Cys Met
 130 135 140
 Ile Leu Ile Gly Ile Asp Glu Glu Gln Gly Pro Gln Val Tyr Lys Cys
 145 150 155 160
 Asp Pro Ala Gly Xaa Tyr Cys Gly Val
 165

<210> 502
 <211> 507

454

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (10)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (361)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (461)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 502

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Arg | Gln | Leu | Cys | Arg | Pro | Ala | Glu | Xaa | Asp | Ser | Val | Met | Ala | Glu |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gln | Val | Ala | Leu | Ser | Arg | Thr | Gln | Val | Cys | Gly | Ile | Leu | Arg | Glu | Glu |
| | | | 20 | | | | | 25 | | | | | 30 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Phe | Gln | Gly | Asp | Ala | Phe | His | Gln | Ser | Asp | Thr | His | Ile | Phe | Ile |
| | 35 | | | | | | 40 | | | | | 45 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Met | Gly | Ala | Ser | Gly | Asp | Leu | Ala | Lys | Lys | Lys | Ile | Tyr | Pro | Thr |
| | 50 | | | | | 55 | | | | | 60 | | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Trp | Trp | Leu | Phe | Arg | Asp | Gly | Leu | Leu | Pro | Glu | Asn | Thr | Phe | Ile |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Gly | Tyr | Ala | Arg | Ser | Arg | Leu | Thr | Val | Ala | Asp | Ile | Arg | Lys | Gln |
| | | | | 85 | | | | | 90 | | | | | 95 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Glu | Pro | Phe | Phe | Lys | Ala | Thr | Pro | Glu | Glu | Lys | Leu | Lys | Leu | Glu |
| | | 100 | | | | | | 105 | | | | | 110 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asp | Phe | Phe | Ala | Arg | Asn | Ser | Tyr | Val | Ala | Gly | Gln | Tyr | Asp | Asp | Ala |
| | 115 | | | | | | 120 | | | | | 125 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Ser | Tyr | Gln | Arg | Leu | Asn | Ser | His | Met | Asn | Ala | Leu | His | Leu | Gly |
| | 130 | | | | | 135 | | | | | 140 | | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Gln | Ala | Asn | Arg | Leu | Phe | Tyr | Leu | Ala | Leu | Pro | Pro | Thr | Val | Tyr |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Ala | Val | Thr | Lys | Asn | Ile | His | Glu | Ser | Cys | Met | Ser | Gln | Ile | Gly |
| | | | | 165 | | | | | 170 | | | | | 175 | |

455

Trp Asn Arg Ile Ile Val Glu Lys Pro Phe Gly Arg Asp Leu Gln Ser
 180 185 190
 Ser Asp Arg Leu Ser Asn His Ile Ser Ser Leu Phe Arg Glu Asp Gln
 195 200 205
 Ile Tyr Arg Ile Asp His Tyr Leu Gly Lys Glu Met Val Gln Asn Leu
 210 215 220
 Met Val Leu Arg Phe Ala Asn Arg Ile Phe Gly Pro Ile Trp Asn Arg
 225 230 235 240
 Asp Asn Ile Ala Cys Val Ile Leu Thr Phe Lys Glu Pro Phe Gly Thr
 245 250 255
 Glu Gly Arg Gly Gly Tyr Phe Asp Glu Phe Gly Ile Ile Arg Asp Val
 260 265 270
 Met Gln Asn His Leu Leu Gln Met Leu Cys Leu Val Ala Met Glu Lys
 275 280 285
 Pro Ala Ser Thr Asn Ser Asp Asp Val Arg Asp Glu Lys Val Lys Val
 290 295 300
 Leu Lys Cys Ile Ser Glu Val Gln Ala Asn Asn Val Val Leu Gly Gln
 305 310 315 320
 Tyr Val Gly Asn Pro Asp Gly Glu Gly Glu Ala Thr Lys Gly Tyr Leu
 325 330 335
 Asp Asp Pro Thr Val Pro Arg Gly Ser Thr Thr Ala Thr Phe Ala Ala
 340 345 350
 Val Val Leu Tyr Val Glu Asn Glu Xaa Trp Asp Gly Val Pro Phe Ile
 355 360 365
 Leu Arg Cys Gly Lys Ala Leu Asn Glu Arg Lys Ala Glu Val Arg Leu
 370 375 380
 Gln Phe His Asp Val Ala Gly Asp Ile Phe His Gln Gln Cys Lys Arg
 385 390 395 400
 Asn Glu Leu Val Ile Arg Val Gln Pro Asn Glu Ala Val Tyr Thr Lys
 405 410 415
 Met Met Thr Lys Lys Pro Gly Met Phe Phe Asn Pro Glu Glu Ser Glu
 420 425 430
 Leu Asp Leu Thr Tyr Gly Asn Arg Tyr Lys Asn Val Lys Leu Pro Asp
 435 440 445

456

Ala Tyr Glu Arg Leu Ile Leu Asp Val Phe Cys Gly Xaa Gln Met His
 450 455 460

Phe Val Arg Arg Thr Ser Ser Val Arg Pro Gly Val Phe Ser Pro His
 465 470 475 480

Cys Cys Thr Arg Leu Ser Trp Arg Ser Pro Ser Pro Ser Pro Ile Phe
 485 490 495

Met Ala Ala Glu Ala Pro Arg Arg Gln Thr Ser
 500 505

<210> 503
 <211> 260
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (69)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 503
 Gly Pro Glu Val Leu Pro Glu Pro Arg Val Pro Arg Glu Ala Leu Ala
 1 5 10 15

Phe Ile Ile Arg Ser Phe Gly Gly Glu Val Ser Trp Asp Lys Ser Leu
 20 25 30

Cys Ile Gly Ala Thr Tyr Asp Val Thr Asp Ser Arg Ile Thr His Gln
 35 40 45

Ile Val Asp Arg Pro Gly Gln Gln Thr Ser Val Ile Gly Arg Cys Tyr
 50 55 60

Val Gln Pro Gln Xaa Val Phe Asp Ser Val Asn Ala Arg Leu Leu Leu
 65 70 75 80

Pro Val Ala Glu Tyr Phe Ser Gly Val Gln Leu Pro Pro His Leu Ser
 85 90 95

Pro Phe Val Thr Glu Lys Glu Gly Asp Tyr Val Pro Pro Glu Lys Leu
 100 105 110

Lys Leu Leu Ala Leu Gln Arg Gly Glu Asp Pro Gly Asn Leu Asn Glu
 115 120 125

Ser Glu Glu Glu Glu Glu Glu Asp Asp Asn Asn Glu Gly Asp Gly Asp

457

130 135 140
 Glu Glu Gly Glu Asn Glu Glu Glu Glu Asp Ala Glu Ala Gly Ser
 145 150 155 160
 Glu Lys Glu Glu Glu Ala Arg Leu Ala Ala Leu Glu Glu Gln Arg Met
 165 170 175
 Glu Gly Lys Lys Pro Arg Val Met Ala Gly Thr Leu Lys Leu Glu Asp
 180 185 190
 Lys Gln Arg Leu Ala Gln Glu Glu Glu Ser Glu Ala Lys Arg Leu Ala
 195 200 205
 Ile Met Met Met Lys Lys Arg Glu Lys Tyr Leu Tyr Gln Lys Ile Met
 210 215 220
 Phe Gly Lys Arg Arg Lys Ile Arg Glu Ala Asn Lys Leu Ala Glu Lys
 225 230 235 240
 Arg Lys Ala His Asp Glu Ala Val Arg Ser Glu Lys Lys Ala Lys Lys
 245 250 255
 Ala Arg Pro Glu
 260

<210> 504

<211> 424

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (292)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (342)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 504

Leu Leu Gln Arg Cys Tyr Ala Phe Pro Gly His Arg Leu Ala His Ser
 1 5 10 15

Gly Ser Asp Leu Ser Leu Leu Val Pro Glu Ile Glu Asp Met Tyr Ser
 20 25 30

Ser Pro Tyr Leu Arg Pro Ser Glu Ser Pro Ile Thr Val Glu Val Asn

458

| | | |
|---|-----|---------|
| 35 | 40 | 45 |
| Cys Thr Asn Pro Gly Thr Arg Tyr Cys Trp Met Ser Thr Gly Leu Tyr | | |
| 50 | 55 | 60 |
| Ile Pro Gly Arg Gln Ile Ile Glu Val Ser Leu Pro Glu Ala Ala Ala | | |
| 65 | 70 | 75 80 |
| Ser Ala Asp Leu Lys Ile Gln Ile Gly Cys His Thr Asp Asp Leu Thr | | |
| 85 | 90 | 95 |
| Arg Ala Ser Lys Leu Phe Arg Gly Pro Leu Val Ile Asn Arg Cys Cys | | |
| 100 | 105 | 110 |
| Leu Asp Lys Pro Thr Lys Ser Ile Thr Cys Leu Trp Gly Gly Leu Leu | | |
| 115 | 120 | 125 |
| Tyr Ile Ile Val Pro Gln Asn Ser Lys Leu Gly Ser Val Pro Val Thr | | |
| 130 | 135 | 140 |
| Val Lys Gly Ala Val His Ala Pro Tyr Tyr Lys Leu Gly Glu Thr Thr | | |
| 145 | 150 | 155 160 |
| Leu Glu Glu Trp Lys Arg Arg Ile Gln Glu Asn Pro Gly Pro Trp Gly | | |
| 165 | 170 | 175 |
| Glu Leu Ala Thr Asp Asn Ile Ile Leu Thr Val Pro Thr Ala Asn Leu | | |
| 180 | 185 | 190 |
| Arg Thr Leu Glu Asn Pro Glu Pro Leu Leu Arg Leu Trp Asp Glu Val | | |
| 195 | 200 | 205 |
| Met Gln Ala Val Ala Arg Leu Gly Ala Glu Pro Phe Pro Leu Arg Leu | | |
| 210 | 215 | 220 |
| Pro Gln Arg Ile Val Ala Asp Val Gln Ile Ser Val Gly Trp Met His | | |
| 225 | 230 | 235 240 |
| Ala Gly Tyr Pro Ile Met Cys His Leu Glu Ser Val Gln Glu Leu Ile | | |
| 245 | 250 | 255 |
| Asn Glu Lys Leu Ile Arg Thr Lys Gly Leu Trp Gly Pro Val His Glu | | |
| 260 | 265 | 270 |
| Leu Gly Arg Asn Gln Gln Arg Gln Glu Trp Glu Phe Pro Pro His Thr | | |
| 275 | 280 | 285 |
| Thr Glu Ala Xaa Cys Asn Leu Trp Cys Val Tyr Val His Glu Thr Val | | |
| 290 | 295 | 300 |
| Leu Gly Ile Pro Arg Ser Arg Ala Asn Ile Ala Leu Trp Pro Pro Val | | |

[illegible]

<211> 70

<212> PRT

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (49)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (54)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (66)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (70)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 505

460

Leu His Gln Ser Leu Leu His Leu Glu Lys Thr Asn Glu Arg Lys Ser
 1 5 10 15
 Ile Phe Leu Ile His Tyr Pro Asn Asn Asn Arg Thr Pro Tyr Arg Asn
 20 25 30
 Tyr Tyr His Tyr Val Ser Lys His Tyr Ile Pro Ile Thr Tyr Pro Thr
 35 40 45
 Xaa Ser Ile Ile Asp Xaa Ile Ser Ile Pro Thr Met Ile Ser Ala Leu
 50 55 60
 Asn Xaa Gln Asn Lys Xaa
 65 70

<210> 506

<211> 434

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (69)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (135)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (363)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 506

Ser Thr His Ala Ser Ala His Ala Ser Val Ser Thr Ala Ala Ala Ala
 1 5 10 15
 Ala Leu Ala Ala Ala Val Lys Ala Lys His Leu Ala Ala Val Glu
 20 25 30
 Glu Arg Lys Ile Lys Ser Leu Val Ala Leu Leu Val Glu Thr Gln Met
 35 40 45
 Lys Lys Leu Glu Ile Lys Leu Arg His Phe Glu Glu Leu Glu Thr Ile
 50 55 60
 Met Asp Arg Glu Xaa Glu Ala Leu Glu Tyr Gln Arg Gln Gln Leu Leu

461

| | | | | | | |
|---|-----|----|-----|----|-----|-----|
| 65 | | 70 | | 75 | | 80 |
| Ala Asp Arg Gln Ala Phe His Met Glu Gln Leu Lys Tyr Ala Glu Met | | | | | | |
| | 85 | | 90 | | 95 | |
| Arg Ala Arg Gln Gln His Phe Gln Gln Met His Gln Gln Gln Gln | | | | | | |
| | 100 | | 105 | | 110 | |
| Pro Pro Pro Ala Leu Pro Pro Gly Ser Gln Pro Ile Pro Pro Thr Gly | | | | | | |
| | 115 | | 120 | | 125 | |
| Ala Ala Gly Pro Pro Ala Xaa His Gly Leu Ala Val Ala Pro Ala Ser | | | | | | |
| | 130 | | 135 | | 140 | |
| Val Val Pro Ala Pro Ala Gly Ser Gly Ala Pro Pro Gly Ser Leu Gly | | | | | | |
| | 145 | | 150 | | 155 | 160 |
| Pro Ser Glu Gln Ile Gly Gln Ala Gly Ser Thr Ala Gly Pro Gln Gln | | | | | | |
| | 165 | | 170 | | 175 | |
| Gln Gln Pro Ala Gly Ala Pro Gln Pro Gly Ala Val Pro Pro Gly Val | | | | | | |
| | 180 | | 185 | | 190 | |
| Pro Pro Pro Gly Pro His Gly Pro Ser Pro Phe Pro Asn Gln Gln Thr | | | | | | |
| | 195 | | 200 | | 205 | |
| Pro Pro Ser Met Met Pro Gly Ala Val Pro Gly Ser Gly His Pro Gly | | | | | | |
| | 210 | | 215 | | 220 | |
| Val Ala Gly Asn Ala Pro Leu Gly Leu Pro Phe Gly Met Pro Pro Pro | | | | | | |
| | 225 | | 230 | | 235 | 240 |
| Pro Pro Pro Pro Ala Pro Ser Ile Ile Pro Phe Gly Ser Leu Ala Asp | | | | | | |
| | 245 | | 250 | | 255 | |
| Ser Ile Ser Ile Asn Leu Pro Ala Pro Pro Asn Leu His Gly His His | | | | | | |
| | 260 | | 265 | | 270 | |
| His His Leu Pro Phe Ala Pro Gly Thr Leu Pro Pro Pro Asn Leu Pro | | | | | | |
| | 275 | | 280 | | 285 | |
| Val Ser Met Ala Asn Pro Leu His Pro Asn Leu Pro Ala Thr Thr Thr | | | | | | |
| | 290 | | 295 | | 300 | |
| Met Pro Ser Ser Leu Pro Leu Gly Pro Gly Leu Gly Ser Ala Ala Ala | | | | | | |
| | 305 | | 310 | | 315 | 320 |
| Gln Ser Pro Ala Ile Val Ala Ala Val Gln Gly Asn Leu Leu Pro Ser | | | | | | |
| | 325 | | 330 | | 335 | |
| Ala Ser Pro Leu Pro Asp Pro Gly Thr Pro Leu Pro Pro Asp Pro Thr | | | | | | |

462

[illegible]

```
<210> 507
<211> 303
<212> PRT
<213> Homo sapiens
```

```
<220>  
<221> SITE  
<222> (165)  
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
<221> SITE
<222> (280)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```

<400> 507
Glu Tyr Val Phe Pro Ala Lys Lys Lys Leu Gln Glu Tyr Arg Val Leu
  1             5             10             15
Ile Thr Thr Leu Ile Thr Ala Gly Ser Trp Ser Arg Pro Ser Phe Pro
      20             25             30
Leu Ile Thr Ser His Thr Ser Ser Ser Met Arg Leu Ala Thr Ala Trp
      35             40             45
Ser Leu Arg Ser Leu Val Ala Ile Ala Gly Leu Met Glu Val Lys Glu
      50             55             60
Thr Gly Asp Pro Gly Gly Gln Leu Val Leu Ala Gly Asp Pro Arg Gln

```

463

| | | | | | | |
|-----------------|-----------------|---------------------|-----------------|-----|--|----|
| 65 | | 70 | | 75 | | 80 |
| Leu Gly Pro Val | Leu Arg Ser Pro | Leu Thr Gln Lys His | Gly Leu Gly | | | |
| | 85 | 90 | 95 | | | |
| Tyr Ser Leu Leu | Glu Arg Leu Leu | Thr Tyr Asn Ser | Leu Tyr Lys Lys | | | |
| | 100 | 105 | 110 | | | |
| Gly Pro Asp Gly | Tyr Asp Pro Gln | Phe Ile Thr Lys | Leu Leu Arg Asn | | | |
| | 115 | 120 | 125 | | | |
| Tyr Arg Ser His | Pro Thr Ile Leu | Asp Ile Pro Asn | Gln Leu Tyr Tyr | | | |
| | 130 | 135 | 140 | | | |
| Glu Gly Glu Leu | Gln Ala Cys Ala | Asp Val Val Asp | Arg Glu Arg Phe | | | |
| | 145 | 150 | 155 | 160 | | |
| Cys Arg Trp Ala | Xaa Leu Pro Arg | Gln Gly Phe Pro | Ile Ile Phe His | | | |
| | 165 | 170 | 175 | | | |
| Gly Val Met Gly | Lys Asp Glu Arg | Glu Gly Asn Ser | Pro Ser Phe Phe | | | |
| | 180 | 185 | 190 | | | |
| Asn Pro Glu Glu | Ala Ala Thr Val | Thr Ser Tyr Leu | Lys Leu Leu Leu | | | |
| | 195 | 200 | 205 | | | |
| Ala Pro Ser Ser | Lys Lys Gly Lys | Ala Arg Leu Ser | Pro Arg Ser Val | | | |
| | 210 | 215 | 220 | | | |
| Gly Val Ile Ser | Pro Tyr Arg Lys | Gln Val Glu Lys | Ile Arg Tyr Cys | | | |
| | 225 | 230 | 235 | 240 | | |
| Ile Thr Lys Leu | Asp Arg Glu Leu | Arg Gly Leu Asp | Asp Ile Lys Asp | | | |
| | 245 | 250 | 255 | | | |
| Leu Lys Val Gly | Ser Val Glu Glu | Phe Gln Gly Gln | Glu Arg Ser Val | | | |
| | 260 | 265 | 270 | | | |
| Ile Leu Ile Ser | Thr Val Arg Xaa | Ala Arg Ala Leu | Cys Ser Trp Ile | | | |
| | 275 | 280 | 285 | | | |
| Trp Thr Leu Ile | Trp Val Ser Leu | Arg Thr Pro Arg | Gly Ser Met | | | |
| | 290 | 295 | 300 | | | |

<210> 508

<211> 250

<212> PRT

<213> Homo sapiens

464

<220>

<221> SITE

<222> (16)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 508

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Gln | Tyr | Leu | Pro | Leu | Thr | Glu | Glu | Glu | Leu | Glu | Lys | Glu | Ala | Xaa |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Lys | Val | Glu | Gly | Phe | Asp | Leu | Val | Gln | Lys | Pro | Ser | Tyr | Tyr | Val | Arg |
| | | 20 | | | | | | 25 | | | | | 30 | | |
| Leu | Gly | Ser | Leu | Ser | Thr | Lys | Leu | His | Ser | Arg | Ala | Tyr | Gln | Gln | Ala |
| | 35 | | | | | | 40 | | | | | 45 | | | |
| Leu | Ser | Arg | Val | Lys | Glu | Ala | Lys | Gln | Lys | Ser | Gln | Gln | Thr | Ile | Ser |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Gln | Leu | His | Ser | Thr | Val | His | Leu | Ile | Glu | Phe | Ala | Arg | Lys | Asn | Val |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Tyr | Ser | Ala | Asn | Gln | Lys | Ile | Gln | Asp | Ala | Gln | Asp | Lys | Leu | Tyr | Leu |
| | | | 85 | | | | | 90 | | | | | | 95 | |
| Ser | Trp | Val | Glu | Trp | Lys | Arg | Ser | Ile | Gly | Tyr | Asp | Asp | Thr | Asp | Glu |
| | | 100 | | | | | | 105 | | | | | 110 | | |
| Ser | His | Cys | Ala | Glu | His | Ile | Glu | Ser | Arg | Thr | Leu | Ala | Ile | Ala | Arg |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Asn | Leu | Thr | Gln | Gln | Leu | Gln | Thr | Thr | Cys | His | Thr | Leu | Leu | Ser | Asn |
| 130 | | | | | | 135 | | | | | | 140 | | | |
| Ile | Gln | Gly | Val | Pro | Gln | Asn | Ile | Gln | Asp | Gln | Ala | Lys | His | Met | Gly |
| 145 | | | | | 150 | | | | | 155 | | | | 160 | |
| Val | Met | Ala | Gly | Asp | Ile | Tyr | Ser | Val | Phe | Arg | Asn | Ala | Ala | Ser | Phe |
| | | | 165 | | | | | | 170 | | | | | 175 | |
| Lys | Glu | Val | Ser | Asp | Ser | Leu | Leu | Thr | Ser | Ser | Lys | Gly | Gln | Leu | Gln |
| | | 180 | | | | | | 185 | | | | | 190 | | |
| Lys | Met | Lys | Glu | Ser | Leu | Asp | Asp | Val | Met | Asp | Tyr | Leu | Val | Asn | Asn |
| | 195 | | | | | | 200 | | | | | 205 | | | |
| Thr | Pro | Leu | Asn | Trp | Leu | Val | Gly | Pro | Phe | Tyr | Pro | Gln | Leu | Thr | Glu |
| 210 | | | | | | 215 | | | | | | 220 | | | |
| Ser | Gln | Asn | Ala | Gln | Asp | Gln | Gly | Ala | Glu | Met | Asp | Lys | Ser | Ser | Gln |
| 225 | | | | | 230 | | | | | 235 | | | | | 240 |

<400> 510
Gly Ala Met Arg Gly Asp Arg Gly Arg Gly Arg Gly Gly Arg Phe Gly
1 5 10 15
Ser Arg Gly Gly Pro Gly Gly Gly Phe Arg Pro Phe Val Pro His Ile
20 25 30

466

Pro Phe Asp Phe Tyr Leu Cys Glu Met Ala Phe Pro Arg Val Lys Pro
 35 40 45
 Ala Pro Asp Glu Thr Ser Phe Ser Glu Ala Leu Leu Lys Arg Asn Gln
 50 55 60
 Asp Leu Ala Pro Asn Ser Ala Glu Gln Ala Ser Ile Leu Ser Leu Val
 65 70 75 80
 Thr Lys Ile Asn Asn Val Ile Asp Asn Leu Ile Val Ala Pro Gly Thr
 85 90 95
 Phe Glu Val Gln Ile Glu Glu Val Arg Gln Val Gly Ser Tyr Lys Lys
 100 105 110
 Gly Thr Met Thr Thr Gly His Asn Val Ala Asp Leu Val Val Ile Leu
 115 120 125
 Lys Ile Leu Pro Thr Leu Glu Ala Val Ala Ala Leu Gly Asn Lys Val
 130 135 140
 Val Glu Ser Leu Arg Ala Gln Asp Pro Ser Glu Val Leu Thr Met Leu
 145 150 155 160
 Thr Asn Glu Thr Gly Phe Glu Ile Ser Ser Ser Asp Ala Thr Val Lys
 165 170 175
 Ile Leu Ile Thr Thr Val Pro Pro Asn Leu Arg Lys Leu Asp Pro Glu
 180 185 190
 Leu His Leu Asp Ile Lys Val Leu Gln Ser Ala Leu Ala Ala Ile Arg
 195 200 205
 His Ala Arg Trp Phe Glu Glu Asn Ala Ser Gln Ser Thr Val Lys Val
 210 215 220
 Leu Ile Arg Leu Leu Lys Asp Leu Arg Ile Arg Phe Pro Gly Phe Glu
 225 230 235 240
 Pro Leu Thr Pro Trp Ile Leu Asp Leu Leu Gly His Tyr Ala Val Met
 245 250 255
 Asn Asn Pro Thr Arg Gln Pro Leu Ala Leu Asn Val Ala Tyr Arg Arg
 260 265 270
 Cys Leu Gln Ile Leu Ala Ala Gly Leu Phe Leu Pro Gly Ser Val Gly
 275 280 285
 Ile Thr Asp Pro Cys Glu Ser Gly Asn Phe Arg Val His Thr Val Met
 290 295 300

467

Thr Leu Glu Gln Gln Asp Met Val Cys Tyr Thr Ala Gln Thr Leu Val
 305 310 315 320
 Arg Ile Leu Ser His Gly Gly Phe Arg Lys Ile Leu Gly Gln Glu Gly
 325 330 335
 Asp Ala Ser Tyr Leu Ala Ser Glu Ile Ser Thr Trp Asp Gly Val Ile
 340 345 350
 Val Thr Pro Ser Glu Lys Ala Tyr Glu Lys Pro Pro Glu Lys Lys Glu
 355 360 365
 Gly Glu Glu Glu Glu Glu Asn Thr Glu Glu Pro Pro Gln Gly Glu Glu
 370 375 380
 Glu Glu Ser Met Glu Thr Gln Glu
 385 390

<210> 511
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 511
 His Gly Gly Gly Lys Gly Arg Gln Val Gly Leu His Ser Val Gln Arg
 1 5 10 15
 Pro Ala Arg Arg Glu Thr Ala Ala Ser Trp Gly Leu Cys Val Lys Ile
 20 25 30
 Pro Asp Leu Gly Val Ala Phe Val Tyr Lys Met Gln Glu Gly Lys Pro
 35 40 45
 Val Pro Asp Ser Ser Arg Gln His Ala Gln Leu Ser Gly Ser Pro Val
 50 55 60
 Ser Gln Gly Leu Ser Leu Pro Leu
 65 70

<210> 512
 <211> 181
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (14)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (33)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (135)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 512

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Trp | Cys | Ser | Cys | Ala | His | Ser | Ser | Ala | Trp | Pro | Gly | Xaa | Trp | Gly |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Ser | Gly | Ile | Pro | Gln | Gln | Ala | Pro | Met | Thr | Val | Cys | Asp | Gln | Ala |
| | | 20 | | | | | 25 | | | | | | 30 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Xaa | Pro | Val | Thr | Phe | Leu | Leu | Leu | His | Leu | Glu | Gly | Gly | Asp | Ile | His |
| | 35 | | | | | | 40 | | | | | 45 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Val | Ser | His | Leu | Ser | Ser | Pro | Pro | Pro | Gly | Val | Ala | His | Arg | Met |
| | 50 | | | | | 55 | | | | | 60 | | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Thr | Gly | Gly | Ser | Arg | Asn | Pro | Asn | Pro | Ala | Trp | Leu | Gly | Gly | Ala |
| 65 | | | | 70 | | | | | 75 | | | | | | 80 |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Leu | Val | Arg | Gly | Arg | Pro | Ala | Ser | Leu | Ala | Pro | Trp | Gly | His | Ser |
| | | | 85 | | | | | | 90 | | | | | 95 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Trp | Lys | Arg | Gly | Leu | Ala | His | Ala | Pro | Leu | Arg | Ala | Gly | Thr | Cys | Thr |
| | 100 | | | | | | | 105 | | | | | 110 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | His | Thr | Arg | His | Ser | Ala | Cys | Trp | Asn | Arg | Trp | Leu | Cys | Ser | Cys |
| | 115 | | | | | | 120 | | | | | 125 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Gly | Pro | Arg | Ala | Ala | Xaa | Leu | Arg | Pro | Cys | Thr | Ser | His | Met | His |
| | 130 | | | | | 135 | | | | | 140 | | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Trp | Thr | Arg | Ala | Glu | Thr | Pro | Val | Cys | Tyr | Arg | Ala | Leu | Val | Leu | Cys |
| 145 | | | | 150 | | | | | 155 | | | | | 160 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Pro | Gly | Ala | Thr | Ala | Gln | Ser | Ser | Gln | Trp | Arg | Ser | Thr | Pro | Leu |
| | | | 165 | | | | | | 170 | | | | | 175 | |

| | | | | |
|-----|-----|-----|-----|-----|
| Asp | Ser | Ile | Phe | Phe |
| | | | 180 | |

469

<210> 513
 <211> 202
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (15)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 513
 Leu Gly Asp Thr Ile Glu Gly Thr Pro Ala Gly Thr Val Pro Xaa Phe
 1 5 10 15
 Pro Gly Arg Pro Thr Arg Ala Ile Met Ala Gln Asp Gln Gly Glu Lys
 20 25 30
 Glu Asn Pro Met Arg Glu Leu Arg Ile Arg Lys Leu Cys Leu Asn Ile
 35 40 45
 Cys Val Gly Glu Ser Gly Asp Arg Leu Thr Arg Ala Ala Lys Val Leu
 50 55 60
 Glu Gln Leu Thr Gly Gln Thr Pro Val Phe Ser Lys Ala Arg Tyr Thr
 65 70 75 80
 Val Arg Ser Phe Gly Ile Arg Arg Asn Glu Lys Ile Ala Val His Cys
 85 90 95
 Thr Val Arg Gly Ala Lys Ala Glu Glu Ile Leu Glu Lys Gly Leu Lys
 100 105 110
 Val Arg Glu Tyr Glu Leu Arg Lys Asn Asn Phe Ser Asp Thr Gly Asn
 115 120 125
 Phe Gly Phe Gly Ile Gln Glu His Ile Asp Leu Gly Ile Lys Tyr Asp
 130 135 140
 Pro Ser Ile Gly Ile Tyr Gly Leu Asp Phe Tyr Val Val Leu Gly Arg
 145 150 155 160
 Pro Gly Phe Ser Ile Ala Asp Lys Lys Arg Arg Thr Gly Cys Ile Gly
 165 170 175
 Ala Lys His Arg Ile Ser Lys Glu Glu Ala Met Arg Trp Phe Gln Gln
 180 185 190
 Lys Tyr Asp Gly Ile Ile Leu Pro Gly Lys
 195 200

470

<210> 514
 <211> 63
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (1)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (2)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (5)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (16)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (35)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 514
 Xaa Xaa Lys Asn Xaa Ile Thr Pro Lys Glu Glu Ser Pro Pro His Xaa
 1 5 10 15
 Ala Leu Leu Ser Lys Cys Leu Leu Thr Pro Ser Pro Lys Met Pro Pro
 20 25 30
 Ile Leu Xaa Val Met Ala Ala Leu Gly Phe Glu Arg Arg Glu Phe Gly
 35 40 45
 Ser Thr Ser Val Glu Arg Val Gln Ser Arg Gln Leu Asp Cys Phe
 50 55 60

<210> 515
 <211> 218
 <212> PRT
 <213> Homo sapiens

471

<220>

<221> SITE

<222> (151)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (209)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (211)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 515

Ser Leu Ala Arg Gly Cys Gln Arg Pro Asp Ala Val Leu Tyr Ala Arg
 1 5 10 15

His Tyr Asn Ile Pro Val Ile His Ala Phe Arg Arg Ala Val Asp Asp
 20 25 30

Pro Gly Leu Val Phe Asn Gln Leu Pro Lys Met Leu Tyr Pro Glu Tyr
 35 40 45

His Lys Val His Gln Met Met Arg Glu Gln Ser Ile Leu Ser Pro Ser
 50 55 60

Pro Tyr Glu Gly Tyr Arg Ser Leu Pro Arg His Gln Leu Leu Cys Phe
 65 70 75 80

Lys Glu Asp Cys Gln Ala Val Phe Gln Asp Leu Glu Gly Val Glu Lys
 85 90 95

Val Phe Gly Val Ser Leu Val Leu Val Leu Ile Gly Ser His Pro Asp
 100 105 110

Leu Ser Phe Leu Pro Gly Ala Gly Ala Asp Phe Ala Val Asp Pro Asp
 115 120 125

Gln Pro Leu Ser Ala Lys Arg Asn Pro Ile Asp Val Asp Pro Phe Thr
 130 135 140

Tyr Gln Ser Thr Arg Gln Xaa Gly Leu Tyr Ala Met Gly Pro Leu Ala
 145 150 155 160

Gly Asp Asn Phe Val Arg Phe Val Gln Gly Gly Ala Leu Ala Val Ala
 165 170 175

Ser Ser Leu Leu Arg Lys Glu Gln Asn His Leu His Arg Gln Pro Trp
 180 185 190

472

Ser Ser Leu Arg Gly Ile His Pro Leu Ile Asp Leu Lys Ser Gly Val
195 200 205

Xaa Pro Xaa Leu Val Lys Leu Thr Ala Gln
210 215

<210> 516

<211> 41

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (22)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 516

Asn Gly Arg Pro Asp Ser Thr Gly Pro Ala Ile Pro Gly Ile Leu Ser
1 5 10 15

Trp Gly Phe Glu Thr Xaa Leu Arg Asp Arg Glu Thr Asp Pro Arg Asn
20 25 30

Val Leu Asn Cys Asn Gly Pro His Thr
35 40

<210> 517

<211> 250

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (118)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (161)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (204)

<223> Xaa equals any of the naturally occurring L-amino acids

473

<400> 517

Gly Phe Asn Arg Ser Phe Cys Gly Arg Asn Ala Thr Val Tyr Gly Lys
 1 5 10 15
 Gly Val Tyr Phe Ala Arg Arg Ala Ser Leu Ser Val Gln Asp Arg Tyr
 20 25 30
 Ser Pro Pro Asn Ala Asp Gly His Lys Ala Val Phe Val Ala Arg Val
 35 40 45
 Leu Thr Gly Asp Tyr Gly Gln Gly Arg Arg Gly Leu Arg Ala Pro Pro
 50 55 60
 Leu Arg Gly Pro Gly His Val Leu Leu Arg Tyr Asp Ser Ala Val Asp
 65 70 75 80
 Cys Ile Cys Gln Pro Ser Ile Phe Val Ile Phe His Asp Thr Gln Ala
 85 90 95
 Leu Pro Thr His Leu Ile Thr Cys Glu Ala Arg Ala Pro Arg Phe Pro
 100 105 110
 Arg Arg Pro Leu Trp Xaa Pro Gly Pro Leu Pro Arg His Leu Thr Glu
 115 120 125
 Gly Ala Thr Leu Trp Pro Pro Ala Ser Gln Ala Pro Ser Ser Ala Gln
 130 135 140
 Ala Asp Ala Pro Arg Pro Gln Leu Trp Pro Pro Glu Leu Ser Pro Gly
 145 150 155 160
 Xaa Pro Cys Leu Pro Leu Arg Ala Pro Glu Gly Gly Val Gly Asp Gly
 165 170 175
 Gly Gln Gln Arg Pro Arg Gly Ala Gly Leu Gly Pro Ser Leu Gly Arg
 180 185 190
 Pro His His Gln Gly Ser Ala Glu Pro Arg Arg Xaa His Arg Pro Pro
 195 200 205
 Ala Ala Pro Arg Pro Arg Pro Ser Arg Leu Cys Cys Leu Asn Lys Arg
 210 215 220
 Glu Arg Glu Pro Arg Arg Lys Gly Pro Gly Lys Lys Lys Lys Lys Lys
 225 230 235 240
 Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
 245 250

474

<210> 518
 <211> 100
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (3)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (7)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 518
 Asn Pro Xaa Lys Lys Leu Xaa Ile Leu Ile Lys Trp Pro Pro Pro Phe
 1 5 10 15
 Pro Pro Ser Phe Pro Pro Ser Pro Asn Ser Leu Ser Ser Ser Ser Phe
 20 25 30
 Pro Pro Pro Leu Ser Leu Phe Ser Pro Ser Phe Thr Phe Leu Ile Ser
 35 40 45
 Val Lys Leu Glu Arg Phe Glu Ile Pro Ile Lys Val Arg Leu Ser Pro
 50 55 60
 Glu Pro Trp Thr Pro Glu Thr Gly Leu Val Thr Asp Ala Phe Lys Leu
 65 70 75 80
 Lys Arg Lys Glu Leu Arg Asn His Tyr Leu Lys Asp Ile Glu Arg Met
 85 90 95
 Tyr Gly Gly Lys
 100

<210> 519
 <211> 60
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (5)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE

<222> (17)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 519

His Glu Asp Gly Xaa Leu Met Gly Cys Arg His Arg Trp His Pro Arg
 1 5 10 15

Xaa Val Pro Phe His Gln Thr Ser Pro Lys Thr Glu Leu Glu Ser Thr
 20 25 30

Ile Phe Gly Ser Pro Arg Leu Ala Ser Gly Leu Phe Pro Glu Trp Gln
 35 40 45

Ser Trp Gly Arg Met Glu Asn Leu Ala Ser Tyr Arg
 50 55 60

<210> 520

<211> 120

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (25)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 520

Ser His Pro Tyr Ala Pro Ser Cys Gly Leu Arg Gly Pro Gly Ala Ala
 1 5 10 15

Ser Arg Ala Arg Thr Arg Glu Arg Xaa Pro Gln Ala Glu Ala Glu Ala
 20 25 30

Arg Ser Thr Pro Gly Pro Ala Gly Ser Arg Leu Gly Pro Glu Thr Phe
 35 40 45

Arg Gln Arg Phe Arg Gln Phe Arg Tyr Gln Asp Ala Ala Gly Pro Arg
 50 55 60

Glu Ala Phe Arg Gln Leu Arg Glu Leu Ser Arg Gln Trp Leu Arg Pro
 65 70 75 80

Asp Ile Arg Thr Lys Glu Gln Ile Val Glu Met Leu Val Gln Glu Gln
 85 90 95

Leu Leu Ala Ile Leu Pro Glu Ala Ala Arg Ala Arg Arg Ile Arg Arg
 100 105 110

Arg Thr Asp Val Arg Ile Thr Gly

476

115

120

<210> 521

<211> 96

<212> PRT

<213> Homo sapiens

<400> 521

Gly His Gln Thr Val Ser Pro Ser Thr Gly Ser Arg Val Thr Arg Met
1 5 10 15

Phe Ser Leu Ile Ser Phe Ser His Val Phe Ile Lys Asp Ile Cys Lys
20 25 30

Leu Pro Lys Asp Glu Gly Thr Cys Arg Asp Phe Ile Leu Lys Trp Tyr
35 40 45

Tyr Asp Pro Asn Thr Lys Ser Cys Ala Arg Phe Trp Tyr Gly Gly Cys
50 55 60

Gly Gly Asn Glu Asn Lys Phe Gly Ser Gln Lys Glu Cys Glu Lys Val
65 70 75 80

Cys Ala Pro Val Leu Ala Lys Pro Gly Val Ile Ser Val Met Gly Thr
85 90 95

<210> 522

<211> 122

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (18)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 522

Asn Ser Gly Phe Arg Pro Lys Asn Pro Val Gly Arg Gly Gly Glu Pro
1 5 10 15

Glu Xaa Cys Gly Gly Ala Gly Gly Leu Gly Cys Thr Leu Val Trp Gly
20 25 30

Gly Thr Gly Ala Ala Val Val Thr Gly Val Val Trp Leu Leu Leu Pro

477

35 40 45
 Asn Gly Gly Val Gly Val Gly Leu Leu Gly Pro Gln Ser Pro Val Gly
 50 55 60
 Gly Ser Asp Ser Ala Pro Tyr Ser Leu His Pro Ala Gly Arg Thr Trp
 65 70 75 80
 Gly Leu Arg Ser Glu Cys Ile Pro Pro Leu Ser Phe Asn Leu Ser Cys
 85 90 95
 Arg Thr His Ser Gly Pro Gly Ala Arg Leu Gly Glu Ala Gly Pro Asn
 100 105 110
 Tyr Gly Ser Arg Glu Leu Gln Val Pro Thr
 115 120

<210> 523

<211> 94

<212> PRT

<213> Homo sapiens

<400> 523

Leu Ile Pro Gln Val Cys Cys Lys His Ser Met Glu Asp Thr Asp Asp
 1 5 10 15
 Ser Leu Val Leu Val Phe Leu Ser Ala Val Asn Val Gln Gln Phe Ala
 20 25 30
 Gln Glu Leu Gly Asp His Ile Cys Leu Ser Gly Gln Gly Ser Glu Val
 35 40 45
 His Trp Asn Leu Leu Arg Asn Leu Phe Val Lys Thr Ile Val Asn Asn
 50 55 60
 Tyr Cys Ile Phe Leu Gln Lys Tyr Ile Leu Glu Asn Cys Ile Leu Ser
 65 70 75 80
 Ile Lys Val Phe Leu Cys Lys Lys Lys Lys Lys Lys Leu Val
 85 90

<210> 524

<211> 93

<212> PRT

<213> Homo sapiens

<220>

<221> SITE
 <222> (78)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (86)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (93)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 524
 Ser Ala Val Met Gly Arg Lys Lys Lys Lys Gln Leu Lys Pro Trp Cys
 1 5 10 15
 Trp Tyr Cys Asn Arg Asp Phe Asp Asp Glu Lys Ile Leu Ile Gln His
 20 25 30
 Gln Lys Ala Lys His Phe Lys Cys His Ile Cys His Lys Lys Leu Tyr
 35 40 45
 Thr Gly Pro Gly Leu Ala Ile His Cys Met Gln Val His Lys Glu Thr
 50 55 60
 Ile Asp Ala Val Pro Asn Ala Tyr Leu Gly Glu Gln Thr Xaa Ile Gly
 65 70 75 80
 Asn Ile Trp Tyr Gly Xaa Tyr Ser Arg Lys Arg Tyr Xaa
 85 90

<210> 525
 <211> 324
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (323)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 525
 Asp Leu Arg Leu Ser Arg Pro Glu Ala Val Glu Ala Glu Ala Met Met
 1 5 10 15
 Ala Ala Met Ala Thr Ala Arg Val Arg Met Gly Pro Arg Cys Ala Gln
 20 25 30

Ala Leu Trp Arg Met Pro Trp Leu Pro Val Phe Leu Ser Leu Ala Ala
 35 40 45
 Ala Ala Ala Ala Ala Ala Glu Gln Gln Val Pro Leu Val Leu Trp
 50 55 60
 Ser Ser Asp Arg Asp Leu Trp Ala Pro Ala Ala Asp Thr His Glu Gly
 65 70 75 80
 His Ile Thr Ser Asp Leu Gln Leu Ser Thr Tyr Leu Asp Pro Ala Leu
 85 90 95
 Glu Leu Gly Pro Arg Asn Val Leu Leu Phe Leu Gln Asp Lys Leu Ser
 100 105 110
 Ile Glu Asp Phe Thr Ala Tyr Gly Gly Val Phe Gly Asn Lys Gln Asp
 115 120 125
 Ser Ala Phe Ser Asn Leu Glu Asn Ala Leu Asp Leu Ala Pro Ser Ser
 130 135 140
 Leu Val Leu Pro Ala Val Asp Trp Tyr Ala Val Ser Thr Leu Thr Thr
 145 150 155 160
 Tyr Leu Gln Glu Lys Leu Gly Ala Ser Pro Leu His Val Asp Leu Ala
 165 170 175
 Thr Leu Arg Glu Leu Lys Leu Asn Ala Ser Leu Pro Ala Leu Leu Leu
 180 185 190
 Ile Arg Leu Pro Tyr Thr Ala Ser Ser Gly Leu Met Ala Pro Arg Glu
 195 200 205
 Val Leu Thr Gly Asn Asp Glu Val Ile Gly Gln Val Leu Ser Thr Leu
 210 215 220
 Lys Ser Glu Asp Val Pro Tyr Thr Ala Ala Leu Thr Ala Val Arg Pro
 225 230 235 240
 Ser Arg Val Ala Arg Asp Val Ala Val Val Ala Gly Gly Leu Gly Arg
 245 250 255
 Gln Leu Leu Gln Lys Gln Pro Val Ser Pro Val Ile His Pro Pro Val
 260 265 270
 Ser Tyr Asn Asp Thr Ala Pro Arg Ile Leu Phe Trp Ala Gln Asn Phe
 275 280 285
 Ser Val Ala Tyr Lys Asp Gln Trp Glu Asp Leu Thr Pro Leu Thr Phe
 290 295 300

480

Gly Val Gln Glu Leu Asn Leu Thr Gly Ser Phe Trp Asn Asp Ser Phe
 305 310 315 320

Ala Ser Xaa His

<210> 526

<211> 66

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (2)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 526

Phe Xaa Val Ser Trp Thr Trp Lys Gln Val Ser Glu Phe Pro Gly Asp
 1 5 10 15

Gln Arg Asp Glu Val Leu Gln Leu Pro Pro Ser Ser Cys Asn Leu Val
 20 25 30

Ser Ser Gly Ala Gly Gly Glu Pro Glu Lys Leu Ala Ser Tyr Ile Thr
 35 40 45

Ser Leu Trp Leu Phe Phe Ile Cys Lys Thr Arg Ile Ile Leu Asn Cys
 50 55 60

Lys Gly
 65

<210> 527

<211> 62

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (40)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 527

Asn Thr Gln Leu Trp Phe Leu Cys Phe Pro Asn Cys Lys Ala Ala Asp
 1 5 10 15

Asn Lys Thr Pro Gly Phe His Val Ser Ser Ala Met Ser Thr Leu Thr
 20 25 30
 Gln Ile Leu Lys Gln Asn Ser Xaa Asn Ala Val Leu Arg Ile Gln Leu
 35 40 45
 Leu Leu Lys Pro Ile Ser Ile Cys Ile Ile Thr Thr Asn Ile
 50 55 60

<210> 528
 <211> 122
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (80)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (104)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (105)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 528
 Tyr Asn Lys Ile Glu Ile Met His Leu Val Met Trp Pro Thr Ser Leu
 1 5 10 15
 Leu Thr Thr Met Asp Cys Phe Gln Gln Gln Leu Ile Phe Trp Ser Val
 20 25 30
 Leu Arg Gly Ala Cys Met Ser Phe Val Thr Ser Gly Ser Thr Pro Ala
 35 40 45
 Val Lys Tyr Cys Phe His Leu Pro Leu Gln Lys Ala Ser Cys Leu Leu
 50 55 60
 Thr Ser Thr Ala Lys Ala Leu Phe Trp Thr Gly Tyr Leu Ile Lys Xaa
 65 70 75 80
 Ile Ser Val Arg Leu Cys Ser Val Ile Pro Ser Glu Pro Arg Phe Val
 85 90 95
 Ser Lys Ala Thr Val Leu Ser Xaa Xaa Pro Cys Val Trp Gly Gln Val

482

100 105 110
 Ala Ile Pro Pro Met Ser Leu Val Ile Leu
 115 120

<210> 529
 <211> 182
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (25)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 529
 Asp Arg Thr Arg Leu Ser Gln Ala Ser Thr Pro Thr Pro Val Cys Trp
 1 5 10 15
 Gly Leu Leu Gln Pro Pro Pro Trp Xaa Glu Ala Trp Tyr Arg Leu Thr
 20 25 30
 His Arg Gly Leu Cys Gln Val Arg Phe Cys Arg Trp Ser Gln Ala Leu
 35 40 45
 Pro Glu Ala Arg Gly Gly Ala Trp Ala Gly Ser Pro Gly Glu Gly Gln
 50 55 60
 Ala Gly Pro Arg Leu His Thr His Ile Gln Pro Ala Gly Leu Ser Ala
 65 70 75 80
 Val Leu Ser Pro Ser Leu Ser Ser Pro Ser Ser Ala Val Thr Leu Ser
 85 90 95
 Ser Pro Ser Leu Pro Ala Ser Pro Pro Ala Ala Pro Pro Val Lys Arg
 100 105 110
 Met Thr Lys Asp Leu Ser Tyr Ala Gly Ser Lys Asn Gln Asn Phe Leu
 115 120 125
 Leu Ala Phe Ser Phe Val Ala Ser Pro Ala Pro Ala Leu Pro Val Ser
 130 135 140
 His Pro Gly Pro Arg Leu Glu Ala Ser Leu His Leu Ser Tyr Cys Phe
 145 150 155 160
 Lys Pro Lys Phe Thr Val Ser Val Gly Gly Gln Asp Leu Leu Ser Pro
 165 170 175

Pro Leu Leu His Pro Pro
180

<210> 530

<211> 183

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (6)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (79)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (80)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (81)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 530

Ala Leu Val Leu Gly Xaa Lys Ser Val Arg Met Ala Ser Ser Arg Met
1 5 10 15

Thr Arg Arg Asp Pro Leu Thr Asn Lys Val Ala Leu Val Thr Ala Ser
20 25 30

Thr Asp Gly Ile Gly Phe Ala Ser Pro Gly Val Trp Pro Arg Thr Gly
35 40 45

Pro Arg Gly Arg Gln Gln Pro Glu Ala Ala Glu Cys Gly Pro Gly Gly
50 55 60

Gly Thr Leu Gln Gly Glu Gly Leu Ser Val Thr Gly Thr Cys Xaa Xaa
65 70 75 80

Xaa Gly Lys Ala Glu Asp Arg Glu Arg Leu Val Ala Thr Ala Val Lys
85 90 95

Leu His Gly Gly Ile Asp Ile Leu Val Ser Asn Ala Ala Val Asn Pro
100 105 110

Phe Arg Leu Ser Ser Gly Gly Gly Xaa Ala Val Arg Leu Trp Val Glu
85 90 95

485

Thr Thr Ala Gln Thr Thr Xaa Ser Cys Gly Gly Cys Asp Pro Val Cys
 100 105 110

Arg Gly Pro Gly Leu Ala Arg Pro Pro Ala Phe Ser Leu Leu Ala Ser
 115 120 125

Pro

<210> 532

<211> 91

<212> PRT

<213> Homo sapiens

<400> 532

Gly Ala Ile Ala Ser Ser Gly Pro Thr Gly Gly Arg Val Arg Lys His
 1 5 10 15

Gln Leu Leu Pro Gly Ala Val Arg Glu Trp Glu Gln Leu Trp Ala Pro
 20 25 30

His Phe Arg Gln Val Leu Pro Lys Pro Ser Asp Ala Val Arg Pro Gly
 35 40 45

Leu Pro Val Val Leu Phe Arg Leu Cys Phe Gln Asn Ala Phe Ile Ser
 50 55 60

Ser Val Pro Phe Gly Pro His Lys Ser Pro Trp Gly Val Gly Gly Gly
 65 70 75 80

Leu Cys Arg His Pro His Phe Lys Ala Gly Ser
 85 90

<210> 533

<211> 67

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (63)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 533

Asn Leu Cys Gln Val Gln Pro Thr Arg Leu Tyr Ser Ser Leu His Ser
 1 5 10 15

486

Gly Leu His His Val Arg Gln Val Thr Gln Lys Ser Tyr Lys Val Ser
 20 25 30

Thr Ser Gly Pro Arg Ala Phe Ser Ser Arg Ser Tyr Thr Ser Gly Pro
 35 40 45

Gly Ser Arg Ile Ser Ser Ser Ala Phe Ser Arg Val Gly Gly Xaa Ser
 50 55 60

Gly Gly Ala
 65

<210> 534

<211> 144

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (140)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (141)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 534

Phe Asn Arg Arg Tyr Pro Lys Ile Gln Phe Ser Leu Ser Thr Gly Pro
 1 5 10 15

Ser Gly Thr Met Leu Asp Gly Val Leu Glu Gly Lys Leu Asn Ala Ala
 20 25 30

Phe Ile Asp Gly Pro Ile Asn His Thr Ala Ile Asp Gly Ile Pro Val
 35 40 45

Tyr Arg Glu Glu Leu Met Ile Val Thr Pro Gln Gly Tyr Ala Pro Val
 50 55 60

Thr Arg Ala Ser Gln Val Asn Gly Ser Asn Ile Tyr Ala Phe Arg Ala
 65 70 75 80

Asn Cys Ser Tyr Arg Arg His Phe Glu Ser Trp Phe His Ala Asp Gly
 85 90 95

Ala Ala Pro Gly Thr Ile His Glu Met Glu Ser Tyr His Gly Met Leu
 100 105 110

Ala Cys Val Ile Ala Gly Ala Gly Ile Ala Leu Ile Pro Arg Ser Met
 115 120 125

Leu Glu Ser Met Pro Gly His His Gln Val Glu Xaa Xaa Ala Val Ser
 130 135 140

<210> 535

<211> 175

<212> PRT

<213> Homo sapiens

<400> 535

Arg Ala Pro Ala Arg Ile Ser Gly Gly Gly Ser Ala Met Val Gly Gly
 1 5 10 15

Gly Gly Val Gly Gly Gly Leu Leu Glu Asn Ala Asn Pro Leu Ile Tyr
 20 25 30

Gln Arg Ser Gly Glu Arg Pro Val Thr Ala Gly Glu Glu Asp Glu Gln
 35 40 45

Val Pro Asp Ser Ile Asp Ala Arg Glu Ile Phe Asp Leu Ile Arg Ser
 50 55 60

Ile Asn Asp Pro Glu His Pro Leu Thr Leu Glu Glu Leu Asn Val Val
 65 70 75 80

Glu Gln Val Arg Val Gln Val Ser Asp Pro Glu Ser Thr Val Ala Val
 85 90 95

Ala Phe Thr Pro Thr Ile Pro His Cys Ser Met Ala Thr Leu Ile Gly
 100 105 110

Leu Ser Ile Lys Val Lys Leu Leu Arg Ser Leu Pro Gln Arg Phe Lys
 115 120 125

Met Asp Val His Ile Thr Pro Gly Thr His Ala Ser Glu His Ala Val
 130 135 140

Asn Lys Gln Leu Ala Asp Lys Glu Arg Val Ala Ala Ala Leu Glu Asn
 145 150 155 160

Thr His Leu Leu Glu Val Val Asn Gln Cys Leu Ser Ala Arg Ser
 165 170 175

488

<210> 536
 <211> 148
 <212> PRT
 <213> Homo sapiens

<400> 536
 Gly Trp His Arg Thr His His Arg Gly Arg His Gln Ala Arg Glu Ala
 1 5 10 15
 Glu Glu Glu Ala Trp Ala Ala Ala Glu Pro Ile Lys Lys Val Arg Lys
 20 25 30
 Ser Leu Ala Leu Asp Ile Val Asp Glu Asp Val Lys Leu Met Met Ser
 35 40 45
 Thr Leu Pro Lys Ser Leu Ser Leu Pro Thr Thr Ala Pro Ser Asn Ser
 50 55 60
 Ser Ser Leu Thr Leu Ser Gly Ile Lys Glu Asp Asn Ser Leu Leu Asn
 65 70 75 80
 Gln Gly Phe Leu Gln Ala Lys Pro Glu Lys Ala Ala Val Ala Gln Lys
 85 90 95
 Pro Arg Ser His Phe Thr Thr Pro Ala Pro Met Ser Ser Ala Trp Lys
 100 105 110
 Thr Val Ala Cys Gly Gly Thr Arg Asp Gln Leu Phe Met Gln Glu Lys
 115 120 125
 Ala Arg Gln Leu Leu Gly Arg Leu Lys Pro Ser His Thr Ser Arg Thr
 130 135 140
 Leu Ile Leu Ser
 145

<210> 537
 <211> 70
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (41)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <220>

489

<221> SITE

<222> (42)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 537

Arg Pro Thr Arg Ser Ala Trp Trp Gly Arg Leu Leu Ser Arg Val Ser
 1 5 10 15

Pro Gln Pro Arg Pro Ala Ser Pro Ser Val Ser Thr Arg Asn Gln Leu
 20 25 30

Pro Glu Ala Arg Arg Gly Val Glu Xaa Xaa Glu Cys Glu Glu Thr Ala
 35 40 45

Ala Ser Ala Glu Arg Ala Gly Pro Pro Arg Ala Leu Val Phe Gly Ala
 50 55 60

Gln Ser Arg Ser Pro Gly
 65 70

<210> 538

<211> 206

<212> PRT

<213> Homo sapiens

<400> 538

Gly Glu Val Ser Ala Ser Gly Ile Ala Arg Arg Gly Gly Pro Met Ala
 1 5 10 15

Pro Leu Gly Gly Ala Pro Arg Leu Val Leu Leu Phe Ser Gly Lys Arg
 20 25 30

Lys Ser Gly Lys Asp Phe Val Thr Glu Ala Leu Gln Ser Arg Leu Gly
 35 40 45

Ala Asp Val Cys Ala Val Leu Arg Leu Ser Gly Pro Leu Lys Glu Gln
 50 55 60

Tyr Ala Gln Glu His Gly Leu Asn Phe Gln Arg Leu Leu Asp Thr Ser
 65 70 75 80

Thr Tyr Lys Glu Ala Phe Arg Lys Asp Met Ile Arg Trp Gly Glu Glu
 85 90 95

Lys Arg Gln Ala Asp Pro Gly Phe Phe Cys Arg Lys Ile Val Glu Gly
 100 105 110

Ile Ser Gln Pro Ile Trp Leu Val Ser Asp Thr Arg Arg Val Ser Asp
 115 120 125

490

Ile Gln Trp Phe Arg Glu Ala Tyr Gly Ala Val Thr Gln Thr Val Arg
 130 135 140

Val Val Ala Leu Glu Gln Ser Arg Gln Gln Arg Gly Trp Val Phe Thr
 145 150 155 160

Pro Gly Val Asp Asp Ala Glu Ser Glu Cys Gly Leu Asp Asn Phe Gly
 165 170 175

Asp Phe Asp Trp Val Ile Glu Asn His Gly Val Glu Gln Arg Leu Glu
 180 185 190

Glu Gln Leu Glu Asn Leu Ile Glu Phe Ile Arg Ser Arg Leu
 195 200 205

<210> 539

<211> 350

<212> PRT

<213> Homo sapiens

<400> 539

Ser Thr Leu Ile Ala Phe Ile Val Ile Ser Thr Leu Phe Pro Leu Leu
 1 5 10 15

Asp Met Thr Glu Ile Tyr Phe Ser Leu Leu Asp Glu Ile Val Asp Thr
 20 25 30

Leu Gly Glu Gly Ala Phe Gly Lys Val Val Glu Cys Ile Asp His Lys
 35 40 45

Ala Gly Gly Arg His Val Ala Val Lys Ile Val Lys Asn Val Asp Arg
 50 55 60

Tyr Cys Glu Ala Ala Arg Ser Glu Ile Gln Val Leu Glu His Leu Asn
 65 70 75 80

Thr Thr Asp Pro Asn Ser Thr Phe Arg Cys Val Gln Met Leu Glu Trp
 85 90 95

Phe Glu His His Gly His Ile Cys Ile Val Phe Glu Leu Leu Gly Leu
 100 105 110

Ser Thr Tyr Asp Phe Ile Lys Glu Asn Gly Phe Leu Pro Phe Arg Leu
 115 120 125

Asp His Ile Arg Lys Met Ala Tyr Gln Ile Cys Lys Ser Val Asn Phe
 130 135 140

491

Leu His Ser Asn Lys Leu Thr His Thr Asp Leu Lys Pro Glu Asn Ile
 145 150 155 160
 Leu Phe Val Gln Ser Asp Tyr Thr Glu Ala Tyr Asn Pro Lys Ile Lys
 165 170 175
 Arg Asp Glu Arg Thr Leu Ile Asn Pro Asp Ile Lys Val Val Asp Phe
 180 185 190
 Gly Ser Ala Thr Tyr Asp Asp Glu His His Ser Thr Leu Val Ser Thr
 195 200 205
 Arg His Tyr Arg Ala Pro Glu Val Ile Leu Ala Leu Gly Trp Ser Gln
 210 215 220
 Pro Cys Asp Val Trp Ser Ile Gly Cys Ile Leu Ile Glu Tyr Tyr Leu
 225 230 235 240
 Gly Phe Thr Val Phe Pro Thr His Asp Ser Lys Glu His Leu Ala Met
 245 250 255
 Met Glu Arg Ile Leu Gly Pro Leu Pro Lys His Met Ile Gln Lys Thr
 260 265 270
 Arg Lys Arg Lys Tyr Phe His His Asp Arg Leu Asp Trp Asp Glu His
 275 280 285
 Ser Ser Ala Gly Arg Tyr Val Ser Arg Arg Cys Lys Pro Leu Lys Glu
 290 295 300
 Phe Met Leu Ser Gln Asp Val Glu His Glu Arg Leu Phe Asp Leu Ile
 305 310 315 320
 Gln Lys Met Leu Glu Tyr Asp Pro Ala Lys Arg Ile Thr Leu Arg Glu
 325 330 335
 Ala Leu Lys His Pro Phe Phe Asp Leu Leu Lys Lys Ser Ile
 340 345 350

<210> 540

<211> 324

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (54)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (56)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (297)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (304)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (305)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (317)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (321)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 540

Gln Ala Thr Met Gly Asn Val Leu Ala Ala Ser Ser Pro Pro Ala Gly
 1 5 10 15

Pro Pro Pro Pro Pro Ala Pro Ala Leu Val Gly Leu Pro Pro Pro Pro
 20 25 30

Pro Ser Pro Pro Gly Phe Thr Leu Pro Pro Leu Gly Gly Ser Leu Gly
 35 40 45

Ala Gly Thr Ser Thr Xaa Arg Xaa Ser Glu Arg Thr Pro Gly Ala Ala
 50 55 60

Thr Ala Ser Ala Ser Gly Ala Ala Glu Asp Gly Ala Cys Gly Cys Leu
 65 70 75 80

Pro Asn Pro Gly Thr Phe Glu Glu Cys His Arg Lys Cys Lys Glu Leu
 85 90 95

Phe Pro Ile Gln Met Glu Gly Val Lys Leu Thr Val Asn Lys Gly Leu
 100 105 110

Ser Asn His Phe Gln Val Asn His Thr Val Ala Leu Ser Thr Ile Gly
 115 120 125
 Glu Ser Asn Tyr His Phe Gly Val Thr Tyr Val Gly Thr Lys Gln Leu
 130 135 140
 Ser Pro Thr Glu Ala Phe Pro Val Leu Val Gly Asp Met Asp Asn Ser
 145 150 155 160
 Gly Ser Leu Asn Ala Gln Val Ile His Gln Leu Gly Pro Gly Leu Arg
 165 170 175
 Ser Lys Met Ala Ile Gln Thr Gln Gln Ser Lys Phe Val Asn Trp Gln
 180 185 190
 Val Asp Gly Glu Tyr Arg Gly Ser Asp Phe Thr Ala Ala Val Thr Leu
 195 200 205
 Gly Asn Pro Asp Val Leu Val Gly Ser Gly Ile Leu Val Ala His Tyr
 210 215 220
 Leu Gln Ser Ile Thr Pro Cys Leu Ala Leu Gly Gly Glu Leu Val Tyr
 225 230 235 240
 His Arg Arg Pro Gly Glu Glu Gly Thr Val Met Ser Leu Ala Gly Lys
 245 250 255
 Tyr Thr Leu Asn Asn Trp Leu Ala Thr Val Thr Leu Gly Gln Ala Gly
 260 265 270
 Met His Ala Thr Tyr Tyr His Lys Ala Ser Asp Gln Leu Gln Val Gly
 275 280 285
 Val Glu Phe Glu Ala Ser Thr Arg Xaa Gln Asp Thr Ser Val Ser Xaa
 290 295 300
 Xaa Val Pro Ala Trp Asn Leu Pro Lys Gly Gln Pro Xaa Leu Ser Lys
 305 310 315 320
 Xaa Leu Leu Gly

<210> 541

<211> 204

<212> PRT

<213> Homo sapiens

<400> 541

494

Arg Gly Pro Thr Phe Thr Pro Glu Ile Met Ala Ala Glu Asp Val Val
 1 5 10 15
 Ala Thr Gly Ala Asp Pro Ser Asp Leu Glu Ser Gly Gly Leu Leu His
 20 25 30
 Glu Ile Phe Thr Ser Pro Leu Asn Leu Leu Leu Leu Gly Leu Cys Ile
 35 40 45
 Phe Leu Leu Tyr Lys Ile Val Arg Gly Asp Gln Pro Ala Ala Ser Gly
 50 55 60
 Asp Ser Asp Asp Asp Glu Pro Pro Pro Leu Pro Arg Leu Lys Arg Arg
 65 70 75 80
 Asp Phe Thr Pro Ala Glu Leu Arg Arg Phe Asp Gly Val Gln Asp Pro
 85 90 95
 Arg Ile Leu Met Ala Ile Asn Gly Lys Val Phe Asp Val Thr Lys Gly
 100 105 110
 Arg Lys Phe Tyr Gly Pro Glu Gly Pro Tyr Gly Val Phe Ala Gly Arg
 115 120 125
 Asp Ala Ser Arg Gly Leu Ala Thr Phe Cys Leu Asp Lys Glu Ala Leu
 130 135 140
 Lys Asp Glu Tyr Asp Asp Leu Ser Asp Leu Thr Ala Ala Gln Gln Glu
 145 150 155 160
 Thr Leu Ser Asp Trp Glu Ser Gln Phe Thr Phe Lys Tyr His His Val
 165 170 175
 Gly Lys Leu Leu Lys Glu Gly Glu Glu Pro Thr Val Tyr Ser Asp Glu
 180 185 190
 Glu Glu Pro Lys Asp Glu Ser Ala Arg Lys Asn Asp
 195 200

<210> 542

<211> 193

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (183)

<223> Xaa equals any of the naturally occurring L-amino acids

495

<400> 542

Pro Ala Tyr Ser Leu Gly Leu Leu Lys Ser Val Leu Asp Gly Gly Gly
 1 5 10 15
 Ala Gly Ala His Gln Ala Arg Ser Asn Pro Ser Cys Met Tyr Pro Gln
 20 25 30
 Gly Thr Phe Val Ile Pro Leu Leu Val Thr Ala His Arg Asp Pro Thr
 35 40 45
 Gln Phe Lys Asp Pro Asp Cys Phe Asn Pro Thr Asn Phe Leu Asp Lys
 50 55 60
 Gly Lys Phe Gln Gly Asn Asp Ala Phe Met Pro Phe Ala Ser Gly Ala
 65 70 75 80
 Gly Arg Gly Gly Arg Gly Pro Ala Trp Thr Gly Ser Gly Val Pro Gly
 85 90 95
 Ala His Cys Ala Pro Val Tyr Pro Ala Lys Gln Met Cys Leu Gly Thr
 100 105 110
 Gly Leu Ala His Ser Gly Ile Phe Leu Phe Leu Thr Ala Thr Leu Gln
 115 120 125
 Arg Phe Cys Leu Leu Pro Val Val Arg Pro Gly Thr Ile Asn Leu Thr
 130 135 140
 Cys Ser Ala Leu Ala Trp Ala Val Ser Pro Gln Thr Ser Ser Ser Ser
 145 150 155 160
 Gln Trp Pro Ala Glu Val Arg Leu His Tyr Gly Gly Leu Thr Gly Pro
 165 170 175
 Gln Thr Ser Ile Pro Ser Xaa Val Asn Lys Gly Pro Lys Leu Gln Lys
 180 185 190

Lys

<210> 543

<211> 352

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (5)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (154)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (167)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 543

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Thr | Val | Arg | Xaa | Pro | Gly | Arg | Pro | Thr | Arg | Pro | Met | Ala | Ala | Glu |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Pro | Gln | Gln | Gln | Lys | Gln | Glu | Pro | Leu | Gly | Ser | Asp | Ser | Glu | Val |
| | | 20 | | | | | | 25 | | | | | 30 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Thr | Val | Trp | Pro | Met | Met | Lys | Pro | Ser | Trp | Leu | Ser | Arg | Thr | Glu |
| | 35 | | | | | | 40 | | | | | 45 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Ser | Lys | Arg | Leu | Leu | Cys | Arg | Thr | Leu | Trp | Cys | Gln | Ser | Gly | Trp |
| 50 | | | | | | 55 | | | | | 60 | | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Ser | Arg | Ser | Tyr | Thr | Arg | Ser | Met | Leu | Lys | Met | Thr | Thr | Ser | Ile |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Arg | Arg | Ser | Arg | Thr | Ser | Thr | Lys | Ser | Thr | Arg | Thr | Ser | Ala | Arg |
| | | | 85 | | | | | | 90 | | | | | 95 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pro | Gly | Leu | Thr | Ala | Thr | Val | Ser | Ile | Gly | Leu | Ser | Asp | Ser | Pro | Thr |
| | | 100 | | | | | | 105 | | | | | 110 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Trp | Arg | His | Cys | Trp | Met | Thr | Ala | Arg | Ser | Cys | Ser | Gly | Glu | Lys | Gly |
| | 115 | | | | | | 120 | | | | | 125 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | His | Trp | Ala | Pro | Arg | Gln | Val | Gly | Val | Tyr | Leu | Leu | Pro | Gly | Arg |
| 130 | | | | | | 135 | | | | | 140 | | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Gly | Cys | Val | Ser | Ser | Arg | Val | Ser | Xaa | Ser | Phe | Pro | Gly | Asp | Gly |
| 145 | | | | | 150 | | | | | 155 | | | | 160 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Asp | Ser | Gly | Leu | Ala | Xaa | Arg | Gly | Ser | Ala | Val | Ser | Ala | Leu | Ala |
| | | | 165 | | | | | | 170 | | | | | 175 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Gly | Leu | Val | Glu | Glu | Pro | Met | Leu | Gly | Pro | Pro | Phe | His | Pro | Thr |
| | | 180 | | | | | | 185 | | | | | 190 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pro | Arg | Phe | Lys | Ala | Val | Ser | Ala | Lys | Ser | Lys | Glu | Asp | Leu | Val | Ser |
| | 195 | | | | | | | 200 | | | | 205 | | | |

497

Gln Gly Phe Thr Glu Phe Thr Ile Glu Asp Phe His Asn Thr Phe Met
 210 215 220
 Asp Leu Ile Glu Gln Val Glu Lys Gln Thr Ser Val Ala Asp Leu Leu
 225 230 235 240
 Ala Ser Phe Asn Asp Gln Ser Thr Ser Asp Tyr Leu Val Val Tyr Leu
 245 250 255
 Arg Leu Leu Thr Ser Gly Tyr Leu Gln Arg Glu Ser Lys Phe Phe Glu
 260 265 270
 His Phe Ile Glu Gly Gly Arg Thr Val Lys Glu Phe Cys Gln Gln Glu
 275 280 285
 Val Glu Pro Met Cys Lys Glu Ser Asp His Ile His Ile Ile Ala Leu
 290 295 300
 Ala Gln Ala Leu Ser Val Ser Ile Gln Val Glu Tyr Met Asp Arg Gly
 305 310 315 320
 Glu Gly Gly Thr Thr Asn Pro His Ile Phe Pro Glu Gly Ser Glu Pro
 325 330 335
 Lys Val Tyr Leu Leu Tyr Arg Pro Gly His Tyr Asp Ile Leu Tyr Lys
 340 345 350

<210> 544

<211> 240

<212> PRT

<213> Homo sapiens

<400> 544

Ser Thr His Ala Ser Glu Met Ala Glu Arg Gly Tyr Ser Phe Ser Leu
 1 5 10 15
 Thr Thr Phe Ser Pro Ser Gly Lys Leu Val Gln Ile Glu Tyr Ala Leu
 20 25 30
 Ala Ala Val Ala Gly Gly Ala Pro Ser Val Gly Ile Lys Ala Ala Asn
 35 40 45
 Gly Val Val Leu Ala Thr Glu Lys Lys Gln Lys Ser Ile Leu Tyr Asp
 50 55 60
 Glu Arg Ser Val His Lys Val Glu Pro Ile Thr Lys His Ile Gly Leu

498

65 70 75 80
 Val Tyr Ser Gly Met Gly Pro Asp Tyr Arg Val Leu Val His Arg Ala
 85 90 95
 Arg Lys Leu Ala Gln Gln Tyr Tyr Leu Val Tyr Gln Glu Pro Ile Pro
 100 105 110
 Thr Ala Gln Leu Val Gln Arg Val Ala Ser Val Met Gln Glu Tyr Thr
 115 120 125
 Gln Ser Gly Gly Val Arg Pro Phe Gly Val Ser Leu Leu Ile Cys Gly
 130 135 140
 Trp Asn Glu Gly Arg Pro Tyr Leu Phe Gln Ser Asp Pro Ser Gly Ala
 145 150 155 160
 Tyr Phe Ala Trp Lys Ala Thr Ala Met Gly Lys Asn Tyr Val Asn Gly
 165 170 175
 Lys Thr Phe Leu Glu Lys Arg Tyr Asn Glu Asp Leu Glu Leu Glu Asp
 180 185 190
 Ala Ile His Thr Ala Ile Leu Thr Leu Lys Glu Ser Phe Glu Gly Gln
 195 200 205
 Met Thr Glu Asp Asn Ile Glu Val Gly Ile Cys Asn Glu Ala Gly Phe
 210 215 220
 Arg Arg Leu Thr Pro Thr Glu Val Lys Asp Tyr Leu Ala Ala Ile Ala
 225 230 235 240

<210> 545

<211> 181

<212> PRT

<213> Homo sapiens

<400> 545

Arg Cys Ile Leu Tyr Thr Gly Phe Met Leu Gly Ala Gln Arg Glu Val
 1 5 10 15
 Asp Ser Arg Leu Leu Ala Leu Pro Gly Arg Lys Val Pro Thr Ser Trp
 20 25 30
 Trp Asp Asp Leu Phe Lys Gly Ala Lys Glu His Gly Ala Val Ala Val
 35 40 45

499

Glu Arg Val Thr Lys Ser Pro Gly Glu Thr Ser Lys Pro Arg Pro Phe
 50 55 60
 Ala Gly Gly Gly Tyr Arg Leu Gly Ala Ala Pro Glu Glu Glu Ser Ala
 65 70 75 80
 Tyr Val Ala Gly Glu Lys Arg Gln His Ser Ser Gln Asp Val His Val
 85 90 95
 Val Leu Lys Leu Trp Lys Ser Gly Phe Ser Leu Asp Asn Gly Glu Leu
 100 105 110
 Arg Ser Tyr Gln Asp Pro Ser Asn Ala Gln Phe Leu Glu Ser Ile Arg
 115 120 125
 Arg Gly Glu Val Pro Ala Glu Leu Arg Arg Leu Ala His Gly Gly Gln
 130 135 140
 Val Asn Leu Asp Met Glu Asp His Arg Asp Glu Asp Phe Val Lys Pro
 145 150 155 160
 Lys Gly Ala Phe Lys Ala Phe Thr Gly Glu Gly Gln Lys Leu Gly Ser
 165 170 175
 Thr Ala Pro Arg Cys
 180

<210> 546

<211> 197

<212> PRT

<213> Homo sapiens

<400> 546

Pro Arg Val Arg Arg Arg Ala Arg Ala Ala Ala Gly Ser Ser His Ala
 1 5 10 15
 Ala Met Ala Asp Ser Glu Leu Gln Leu Val Glu Gln Arg Ile Arg Ser
 20 25 30
 Phe Pro Asp Phe Pro Thr Pro Gly Val Val Phe Arg Asp Ile Ser Pro
 35 40 45
 Val Leu Lys Asp Pro Ala Ser Phe Arg Ala Ala Ile Gly Leu Leu Ala
 50 55 60
 Arg His Leu Lys Ala Thr His Gly Gly Arg Ile Asp Tyr Ile Ala Gly
 65 70 75 80

[illegible]

Tyr Ser Val Ile Lys His Pro Ala Pro Thr Leu Ser Gln Arg Ser Ile
65 70 75 80

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<220> .
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids
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<210> 549  
<211> 379  
<212> PRT  
<213> Homo sapiens  
  
<400> 549  
Val Ala Cys Cys Val Arg Ile Pro Gly Pro Pro Arg Arg Ser Gly Pro  
1 5 10 15  
Ala Met Ala Val Thr Ile Thr Leu Lys Thr Leu Gln Gln Gln Thr Phe  
20 25 30  
Lys Ile Arg Met Glu Pro Asp Glu Thr Val Lys Val Leu Lys Glu Lys  
35 40 45  
Ile Glu Ala Glu Lys Gly Arg Asp Ala Phe Pro Val Ala Gly Gln Lys  
50 55 60  
Leu Ile Tyr Ala Gly Lys Ile Leu Ser Asp Asp Val Pro Ile Arg Asp  
65 70 75 80
```

Tyr Arg Ile Asp Glu Lys Asn Phe Val Val Val Met Val Thr Lys Thr
 85 90 95
 Lys Ala Gly Gln Gly Thr Ser Ala Pro Pro Glu Ala Ser Pro Thr Ala
 100 105 110
 Ala Pro Glu Ser Ser Thr Ser Phe Pro Pro Ala Pro Thr Ser Gly Met
 115 120 125
 Ser His Pro Pro Pro Ala Ala Arg Glu Asp Lys Ser Pro Ser Glu Glu
 130 135 140
 Ser Ala Pro Thr Thr Ser Pro Glu Ser Val Ser Gly Ser Val Pro Ser
 145 150 155 160
 Ser Gly Ser Ser Gly Arg Glu Glu Asp Ala Ala Ser Thr Leu Val Thr
 165 170 175
 Gly Ser Glu Tyr Glu Thr Met Leu Thr Glu Ile Met Ser Met Gly Tyr
 180 185 190
 Glu Arg Glu Arg Val Val Ala Ala Leu Arg Ala Ser Tyr Asn Asn Pro
 195 200 205
 His Arg Ala Val Glu Tyr Leu Leu Thr Gly Ile Pro Gly Ser Pro Glu
 210 215 220
 Pro Glu His Gly Ser Val Gln Glu Ser Gln Val Ser Glu Gln Pro Ala
 225 230 235 240
 Thr Glu Ala Gly Glu Asn Pro Leu Glu Phe Leu Arg Asp Gln Pro Gln
 245 250 255
 Phe Gln Asn Met Arg Gln Val Ile Gln Gln Asn Pro Ala Leu Leu Pro
 260 265 270
 Ala Leu Leu Gln Gln Leu Gly Gln Glu Asn Pro Gln Leu Leu Gln Gln
 275 280 285
 Ile Ser Arg His Gln Glu Gln Phe Ile Gln Met Leu Asn Glu Pro Pro
 290 295 300
 Gly Glu Leu Ala Asp Ile Ser Asp Val Glu Gly Glu Val Gly Ala Ile
 305 310 315 320
 Gly Glu Glu Ala Pro Gln Met Asn Tyr Ile Gln Val Thr Pro Gln Glu
 325 330 335
 Lys Glu Ala Ile Glu Arg Leu Lys Ala Leu Gly Phe Pro Glu Ser Leu
 340 345 350

Val Ile Gln Ala Tyr Phe Ala Cys Glu Lys Asn Glu Asn Leu Ala Ala
 355 360 365

Asn Phe Leu Leu Ser Gln Asn Phe Asp Asp Glu
 370 375

<210> 550

<211> 275

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (6)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (235)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (260)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (261)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (267)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (272)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 550

Cys Ser Cys Lys Arg Xaa His Gln Gln Gln Val Leu Pro Pro Arg Gln
 1 5 10 15

Pro Ser Ala Leu Val Pro Ser Val Thr Glu Tyr Arg Leu Asp Gly His
 20 25 30

504

Thr Ile Ser Asp Leu Ser Arg Ser Ser Arg Gly Glu Leu Ile Pro Ile
 35 40 45
 Ser Pro Ser Thr Glu Val Gly Gly Ser Gly Ile Gly Thr Pro Pro Ser
 50 55 60
 Val Leu Lys Arg Gln Arg Lys Arg Arg Val Ala Leu Ser Pro Val Thr
 65 70 75 80
 Glu Asn Ser Thr Ser Leu Ser Phe Leu Asp Ser Cys Asn Ser Leu Thr
 85 90 95
 Pro Lys Ser Thr Pro Val Lys Thr Leu Pro Phe Ser Pro Ser Gln Phe
 100 105 110
 Leu Asn Phe Trp Asn Lys Gln Asp Thr Leu Glu Leu Glu Ser Pro Ser
 115 120 125
 Leu Thr Ser Thr Pro Val Cys Ser Gln Lys Val Val Val Thr Thr Pro
 130 135 140
 Leu His Arg Asp Lys Thr Pro Leu His Gln Lys His Ala Ala Phe Val
 145 150 155 160
 Thr Pro Asp Gln Lys Tyr Ser Met Asp Asn Thr Pro His Thr Pro Thr
 165 170 175
 Pro Phe Lys Asn Ala Leu Glu Lys Tyr Gly Pro Leu Lys Pro Leu Pro
 180 185 190
 Gln Thr Pro His Leu Glu Glu Asp Leu Lys Glu Val Leu Arg Ser Glu
 195 200 205
 Ala Gly Ile Glu Leu Ile Ile Glu Asp Asp Ile Arg Pro Glu Lys Gln
 210 215 220
 Lys Arg Lys Pro Gly Leu Arg Arg Ser Pro Xaa Lys Lys Val Arg Lys
 225 230 235 240
 Ser Leu Ala Leu Asp Ile Val Asp Glu Asp Val Lys Leu Met Met Ser
 245 250 255
 Thr Leu Pro Xaa Xaa Leu Ser Leu Ala Thr Xaa Ala Pro Cys Lys Xaa
 260 265 270
 Phe Gln Pro
 275

<210> 551

505

<211> 161
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (158)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 551
 Asn Leu Ala Ala Ala Ser Gly Gly Gly Pro Gln Ser Val Ser Gly Thr
 1 5 10 15
 Leu Leu Cys Glu Pro Val Leu Thr Met Phe Ala Thr Ser Gly Ala Val
 20 25 30
 Ala Ala Gly Lys Pro Tyr Ser Cys Ser Glu Cys Gly Lys Ser Phe Cys
 35 40 45
 Tyr Ser Ser Val Leu Leu Arg His Glu Arg Ala His Gly Gly Asp Gly
 50 55 60
 Arg Phe Arg Cys Leu Glu Cys Gly Glu Arg Cys Ala Arg Ala Ala Asp
 65 70 75 80
 Leu Arg Ala His Arg Arg Thr His Ala Gly Gln Thr Leu Tyr Ile Cys
 85 90 95
 Ser Glu Cys Gly Gln Ser Phe Arg His Ser Gly Arg Leu Asp Leu His
 100 105 110
 Leu Gly Ala His Arg Gln Arg Cys Arg Thr Cys Pro Cys Arg Thr Cys
 115 120 125
 Gly Arg Arg Phe Pro His Leu Pro Ala Leu Leu Leu His Arg Arg Arg
 130 135 140
 Gln His Leu Pro Glu Arg Pro Arg Arg Cys Pro Leu Cys Xaa Leu Arg
 145 150 155 160
 Phe

<210> 552
 <211> 405
 <212> PRT
 <213> Homo sapiens

<400> 552

Pro Arg Val Arg Arg Arg Ala Arg Gly Arg Arg Val Arg Pro Ala Gly
 1 5 10 15
 Gly Pro Val Arg Arg Gly Ala Ala Val Arg Gly Ala Leu Arg Gly Ala
 20 25 30
 Ser Leu Gly His Gly Ala Ala Ala Arg Ala Gly Arg Pro Leu Cys Val
 35 40 45
 Arg His Ser Glu Pro Val Cys Gly Ser Asp Ala Asn Thr Tyr Ala Asn
 50 55 60
 Leu Cys Gln Leu Arg Ala Ala Ser Arg Arg Ser Glu Arg Leu His Arg
 65 70 75 80
 Pro Pro Val Ile Val Leu Gln Arg Gly Ala Cys Gly Gln Gly Gln Glu
 85 90 95
 Asp Pro Asn Ser Leu Arg His Lys Tyr Asn Phe Ile Ala Asp Val Val
 100 105 110
 Glu Lys Ile Ala Pro Ala Val Val His Ile Glu Leu Phe Arg Lys Leu
 115 120 125
 Pro Phe Ser Lys Arg Glu Val Pro Val Ala Ser Gly Ser Gly Phe Ile
 130 135 140
 Val Ser Glu Asp Gly Leu Ile Val Thr Asn Ala His Val Val Thr Asn
 145 150 155 160
 Lys His Arg Val Lys Val Glu Leu Lys Asn Gly Ala Thr Tyr Glu Ala
 165 170 175
 Lys Ile Lys Asp Val Asp Glu Lys Ala Asp Ile Ala Leu Ile Lys Ile
 180 185 190
 Asp His Gln Gly Lys Leu Pro Val Leu Leu Leu Gly Arg Ser Ser Glu
 195 200 205
 Leu Arg Pro Gly Glu Phe Val Val Ala Ile Gly Ser Pro Phe Ser Leu
 210 215 220
 Gln Asn Thr Val Thr Thr Gly Ile Val Ser Thr Thr Gln Arg Gly Gly
 225 230 235 240
 Lys Glu Leu Gly Leu Arg Asn Ser Asp Met Asp Tyr Ile Gln Thr Asp
 245 250 255
 Ala Ile Ile Asn Tyr Gly Asn Ser Gly Gly Pro Leu Val Asn Leu Asp
 260 265 270

507

Gly Glu Val Ile Gly Ile Asn Thr Leu Lys Val Thr Ala Gly Ile Ser
 275 280 285
 Phe Ala Ile Pro Ser Asp Lys Ile Lys Lys Phe Leu Thr Glu Ser His
 290 295 300
 Asp Arg Gln Ala Lys Gly Lys Ala Ile Thr Lys Lys Lys Tyr Ile Gly
 305 310 315 320
 Ile Arg Met Met Ser Leu Thr Ser Ser Lys Ala Lys Glu Leu Lys Asp
 325 330 335
 Arg His Arg Asp Phe Pro Asp Val Ile Ser Gly Ala Tyr Ile Ile Glu
 340 345 350
 Val Ile Pro Asp Thr Pro Ala Glu Ala Gly Gly Leu Lys Glu Asn Asp
 355 360 365
 Val Ile Ile Ser Ile Asn Gly Gln Ser Val Val Ser Ala Asn Asp Val
 370 375 380
 Ser Asp Val Ile Lys Arg Glu Ser Thr Leu Asn Met Val Val Arg Arg
 385 390 395 400
 Val Met Lys Ile Ser
 405

<210> 553

<211> 107

<212> PRT

<213> Homo sapiens

<400> 553

Ala Gln Glu Asn Glu Glu Met Glu Gln Pro Met Gln Asn Gly Glu Glu
 1 5 10 15
 Asp Arg Pro Leu Gly Gly Gly Glu Gly His Gln Pro Ala Gly Asn Arg
 20 25 30
 Arg Gly Gln Ala Arg Arg Leu Ala Pro Asn Phe Arg Trp Ala Ile Pro
 35 40 45
 Asn Arg Gln Ile Asn Asp Gly Met Gly Gly Asp Gly Asp Asp Met Glu
 50 55 60
 Ile Phe Met Glu Glu Met Arg Glu Ile Arg Arg Lys Leu Arg Glu Leu
 65 70 75 80
 Gln Leu Arg Asn Cys Leu Arg Ile Leu Met Gly Glu Leu Ser Asn His

508

85 90 95
 His Asp His His Asp Glu Phe Cys Leu Met Pro
 100 105

<210> 554
 <211> 229
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (8)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (15)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (20)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (27)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (78)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 554
 Gly Leu Ser Ala Glu Ser Thr Xaa Thr Ser Thr Met Pro Met Xaa Leu
 1 5 10 15
 Gly Tyr Trp Xaa Ile Arg Gly Leu Ala His Xaa Ile Arg Leu Leu Leu
 20 25 30
 Glu Tyr Thr Asp Ser Ser Tyr Glu Glu Lys Lys Tyr Thr Met Gly Asp
 35 40 45
 Ala Pro Asp Tyr Asp Arg Ser Gln Trp Leu Asn Glu Lys Phe Lys Leu
 50 55 60
 Gly Leu Asp Phe Pro Asn Leu Pro Tyr Leu Ile Asp Gly Xaa His Lys

509

| | | | | | | |
|---|-----|----|-----|----|-----|-----|
| 65 | | 70 | | 75 | | 80 |
| Ile Thr Gln Ser Asn Ala Ile Leu Arg Tyr Ile Ala Arg Lys His Asn | | | | | | |
| | 85 | | 90 | | 95 | |
| Leu Cys Gly Glu Ser Glu Lys Glu Gln Ile Arg Glu Asp Ile Leu Glu | | | | | | |
| | 100 | | 105 | | 110 | |
| Asn Gln Phe Met Asp Ser Arg Met Gln Leu Ala Lys Leu Cys Tyr Asp | | | | | | |
| | 115 | | 120 | | 125 | |
| Pro Asp Phe Glu Lys Leu Lys Pro Glu Tyr Leu Gln Ala Leu Pro Glu | | | | | | |
| | 130 | | 135 | | 140 | |
| Met Leu Lys Leu Tyr Ser Gln Phe Leu Gly Lys Gln Pro Trp Phe Leu | | | | | | |
| | 145 | | 150 | | 155 | 160 |
| Gly Asp Lys Ile Thr Phe Val Asp Phe Ile Ala Tyr Asp Val Leu Glu | | | | | | |
| | 165 | | 170 | | 175 | |
| Arg Asn Gln Val Phe Glu Pro Ser Cys Leu Asp Ala Phe Pro Asn Leu | | | | | | |
| | 180 | | 185 | | 190 | |
| Lys Asp Phe Ile Ser Arg Phe Glu Gly Leu Glu Lys Ile Ser Ala Tyr | | | | | | |
| | 195 | | 200 | | 205 | |
| Met Lys Ser Ser Arg Phe Leu Pro Arg Pro Val Phe Thr Lys Met Ala | | | | | | |
| | 210 | | 215 | | 220 | |
| Val Trp Gly Asn Lys | | | | | | |
| 225 | | | | | | |

<210> 555

<211> 106

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (59)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (60)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (72)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (98)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 555

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Val | Ile | Ser | Val | Asp | Pro | Asn | Asp | Gln | Lys | Lys | Thr | Ala | Cys | Tyr |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asp | Ile | Asp | Val | Glu | Val | Asp | Asp | Thr | Leu | Lys | Thr | Gln | Met | Asn | Ser |
| | | | 20 | | | | | 25 | | | | | 30 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Leu | Leu | Ser | Thr | Ala | Ser | Gln | Gln | Glu | Ile | Ala | Thr | Leu | Asp | Asn |
| | 35 | | | | | | 40 | | | | | | 45 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Thr | Met | Thr | Asp | Val | Val | Gly | Asn | Gln | Xaa | Xaa | Ser | Ala | Glu | Leu |
| | 50 | | | | | 55 | | | | | 60 | | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Ser | Thr | Ser | Ser | Pro | Gly | Xaa | Gly | Gly | Cys | Val | Pro | Ile | Leu | Leu |
| 65 | | | | | 70 | | | | | 75 | | | | 80 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Gln | Gly | Ala | Ala | Glu | Thr | Thr | Arg | Ile | Arg | Ala | Ser | Pro | Gly | Asn |
| | | | 85 | | | | | 90 | | | | | | 95 | |

| | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pro | Xaa | Tyr | Ile | Gly | Pro | Leu | Pro | Gln | Pro |
| | | 100 | | | | | | 105 | |

<210> 556

<211> 86

<212> PRT

<213> Homo sapiens

<400> 556

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Arg | Ala | Thr | Lys | Gln | Asn | Thr | Thr | Lys | Pro | Asn | His | Arg | Ile | Ile |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Asn | Pro | Thr | Phe | Tyr | Thr | Met | Pro | Gln | Phe | Pro | Ile | Thr | Leu | His |
| | | | 20 | | | | | 25 | | | | | 30 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Ser | Phe | Cys | Val | Gln | Leu | Asn | Cys | Asn | Cys | Phe | Leu | Tyr | Leu | Glu |
| | | 35 | | | | | 40 | | | | | 45 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Val | Thr | Ile | Glu | Leu | Glu | Thr | Phe | Tyr | Ser | Gly | Arg | Leu | Gly | Ser |
| | 50 | | | | | 55 | | | | | 60 | | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Trp | Trp | Asp | Ser | Val | Gly | Glu | Arg | Glu | Glu | Gly | Glu | Val | Gly | Gly |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|

511

65

70

75

80

Leu Leu Pro Phe Arg Thr
85

<210> 557

<211> 565

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (57)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (71)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (75)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (82)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (118)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (120)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (552)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 557

Ala Ser Leu Thr Gly Thr Gln Ala Leu Pro Pro Leu Phe Ser Leu Gly
1 5 10 15

Tyr His Gln Ser Arg Trp Asn Tyr Arg Asp Glu Ala Asp Val Leu Glu
 20 25 30
 Val Asp Gln Gly Phe Asp Asp His Asn Leu Pro Cys Asp Val Ile Trp
 35 40 45
 Leu Asp Ile Glu His Ala Asp Gly Xaa Arg Tyr Phe Thr Trp Asp Pro
 50 55 60
 Ser Arg Phe Pro Gln Pro Xaa Thr Met Leu Xaa Arg Leu Ala Ser Lys
 65 70 75 80
 Arg Xaa Lys Leu Val Ala Ile Val Asp Pro His Ile Lys Val Asp Ser
 85 90 95
 Gly Tyr Arg Val His Glu Glu Leu Arg Asn Leu Gly Leu Tyr Val Lys
 100 105 110
 Thr Arg Asp Gly Ser Xaa Tyr Xaa Gly Trp Cys Trp Pro Gly Ser Ala
 115 120 125
 Gly Tyr Pro Asp Phe Thr Asn Pro Thr Met Arg Ala Trp Trp Ala Asn
 130 135 140
 Met Phe Ser Tyr Asp Asn Tyr Glu Gly Ser Ala Pro Asn Leu Phe Val
 145 150 155 160
 Trp Asn Asp Met Asn Glu Pro Ser Val Phe Asn Gly Pro Glu Val Thr
 165 170 175
 Met Leu Lys Asp Ala Gln His Tyr Gly Gly Trp Glu His Arg Asp Val
 180 185 190
 His Asn Ile Tyr Gly Leu Tyr Val His Met Ala Thr Ala Asp Gly Leu
 195 200 205
 Arg Gln Arg Ser Gly Gly Met Glu Arg Pro Phe Val Leu Ala Arg Ala
 210 215 220
 Phe Phe Ala Gly Ser Gln Arg Phe Gly Ala Val Trp Thr Gly Asp Asn
 225 230 235 240
 Thr Ala Glu Trp Asp His Leu Lys Ile Ser Ile Pro Met Cys Leu Ser
 245 250 255
 Leu Gly Leu Val Gly Leu Ser Phe Cys Gly Ala Asp Val Gly Gly Phe
 260 265 270
 Phe Lys Asn Pro Glu Pro Glu Leu Leu Val Arg Trp Tyr Gln Met Gly
 275 280 285

Ala Tyr Gln Pro Phe Phe Arg Ala His Ala His Leu Asp Thr Gly Arg
 290 295 300
 Arg Glu Pro Trp Leu Leu Pro Ser Gln His Asn Asp Ile Ile Arg Asp
 305 310 315 320
 Ala Leu Gly Gln Arg Tyr Ser Leu Leu Pro Phe Trp Tyr Thr Leu Leu
 325 330 335
 Tyr Gln Ala His Arg Glu Gly Ile Pro Val Met Arg Pro Leu Trp Val
 340 345 350
 Gln Tyr Pro Gln Asp Val Thr Thr Phe Asn Ile Asp Asp Gln Tyr Leu
 355 360 365
 Leu Gly Asp Ala Leu Leu Val His Pro Val Ser Asp Ser Gly Ala His
 370 375 380
 Gly Val Gln Val Tyr Leu Pro Gly Gln Gly Glu Val Trp Tyr Asp Ile
 385 390 395 400
 Gln Ser Tyr Gln Lys His His Gly Pro Gln Thr Leu Tyr Leu Pro Val
 405 410 415
 Thr Leu Ser Ser Ile Pro Val Phe Gln Arg Gly Gly Thr Ile Val Pro
 420 425 430
 Arg Trp Met Arg Val Arg Arg Ser Ser Glu Cys Met Lys Asp Asp Pro
 435 440 445
 Ile Thr Leu Phe Val Ala Leu Ser Pro Gln Gly Thr Ala Gln Gly Glu
 450 455 460
 Leu Phe Leu Asp Asp Gly His Thr Phe Asn Tyr Gln Thr Arg Gln Glu
 465 470 475 480
 Phe Leu Leu Arg Arg Phe Ser Phe Ser Gly Asn Thr Leu Val Ser Ser
 485 490 495
 Ser Ala Asp Pro Glu Gly His Phe Glu Thr Pro Ile Trp Ile Glu Arg
 500 505 510
 Val Val Ile Ile Gly Ala Gly Lys Pro Ala Ala Val Val Leu Gln Thr
 515 520 525
 Lys Gly Ser Pro Glu Ser Arg Leu Ser Phe Gln His Asp Pro Glu Thr
 530 535 540
 Ser Val Leu Val Leu Arg Lys Xaa Gly Ile Asn Val Ala Ser Asp Trp
 545 550 555 560

514

Ser Ile His Leu Arg
565

<210> 558

<211> 160

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (39)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 558

Arg Glu Ala Val Leu Pro Gln Ala Val Leu Arg His Pro Val Arg Thr
1 5 10 15

Gln Arg Arg Glu His Arg Gly Arg Gly Leu Leu His Leu Arg Glu Ala
20 25 30

Pro Gly Gly Gly Ala Ala Xaa His Arg Pro His Arg Gly Pro Arg Gly
35 40 45

Pro Ser Arg Gly Ala Glu Gly Glu Arg Pro Pro Glu Gly Pro Ser Arg
50 55 60

Ala Ser Ser Val Thr Thr Phe Thr Gly Glu Pro Asn Thr Cys Pro Arg
65 70 75 80

Cys Ser Lys Lys Val Tyr Phe Ala Glu Lys Val Thr Ser Leu Gly Lys
85 90 95

Asp Trp His Arg Pro Cys Leu Arg Cys Glu Arg Cys Gly Lys Thr Leu
100 105 110

Thr Pro Gly Gly His Ala Glu His Asp Gly Gln Pro Tyr Cys His Lys
115 120 125

Pro Cys Tyr Gly Ile Leu Phe Gly Pro Lys Gly Val Asn Thr Gly Ala
130 135 140

Val Gly Ser Tyr Ile Tyr Asp Arg Asp Pro Glu Gly Lys Val Gln Pro
145 150 155 160

515

<210> 559

<211> 480

<212> PRT

<213> Homo sapiens

<400> 559

Gly Cys Ile Gly Tyr Leu Val Leu Leu Trp Pro Leu Pro Leu Ile His
 1 5 10 15
 Phe Gly Leu Ala Asn Gln Ser Glu Asp Leu Ser Val Phe Tyr Pro Gly
 20 25 30
 Thr Leu Leu Glu Thr Gly His Asp Ile Leu Phe Phe Trp Val Ala Arg
 35 40 45
 Met Val Met Leu Gly Leu Lys Leu Thr Gly Arg Leu Pro Phe Arg Glu
 50 55 60
 Val Tyr Leu His Ala Ile Val Arg Asp Ala His Gly Arg Lys Met Ser
 65 70 75 80
 Lys Ser Leu Gly Asn Val Ile Asp Pro Leu Asp Val Ile Tyr Gly Ile
 85 90 95
 Ser Leu Gln Gly Leu His Asn Gln Leu Leu Asn Ser Asn Leu Asp Pro
 100 105 110
 Ser Glu Val Glu Lys Ala Lys Glu Gly Gln Lys Ala Asp Phe Pro Ala
 115 120 125
 Gly Ile Pro Glu Cys Gly Thr Asp Ala Leu Arg Phe Gly Leu Cys Ala
 130 135 140
 Tyr Met Ser Gln Gly Arg Asp Ile Asn Leu Asp Val Asn Arg Ile Leu
 145 150 155 160
 Gly Tyr Arg His Phe Cys Asn Lys Leu Trp Asn Ala Thr Lys Phe Ala
 165 170 175
 Leu Arg Gly Leu Gly Lys Gly Phe Val Pro Ser Pro Thr Ser Gln Pro
 180 185 190
 Gly Gly His Glu Ser Leu Val Asp Arg Trp Ile Arg Ser Arg Leu Thr
 195 200 205
 Glu Ala Val Arg Leu Ser Asn Gln Gly Phe Gln Ala Tyr Asp Phe Pro
 210 215 220
 Ala Val Thr Thr Ala Gln Tyr Ser Phe Trp Leu Tyr Glu Leu Cys Asp
 225 230 235 240

516

Val Tyr Leu Glu Cys Leu Lys Pro Val Leu Asn Gly Val Asp Gln Val
 245 250 255
 Ala Ala Glu Cys Ala Arg Gln Thr Leu Tyr Thr Cys Leu Asp Val Gly
 260 265 270
 Leu Arg Leu Leu Ser Pro Phe Met Pro Phe Val Thr Glu Glu Leu Phe
 275 280 285
 Gln Arg Leu Pro Arg Arg Met Pro Gln Ala Pro Pro Ser Leu Cys Val
 290 295 300
 Thr Pro Tyr Pro Glu Pro Ser Glu Cys Ser Trp Lys Asp Pro Glu Ala
 305 310 315 320
 Glu Ala Ala Leu Glu Leu Ala Leu Ser Ile Thr Arg Ala Val Arg Ser
 325 330 335
 Leu Arg Ala Asp Tyr Asn Leu Thr Arg Ile Arg Pro Asp Cys Phe Leu
 340 345 350
 Glu Val Ala Asp Glu Ala Thr Gly Ala Leu Ala Ser Ala Val Ser Gly
 355 360 365
 Tyr Val Gln Ala Leu Ala Ser Ala Gly Val Val Ala Val Leu Ala Leu
 370 375 380
 Gly Ala Pro Ala Pro Gln Gly Cys Ala Val Ala Leu Ala Ser Asp Arg
 385 390 395 400
 Cys Ser Ile His Leu Gln Leu Gln Gly Leu Val Asp Pro Ala Arg Glu
 405 410 415
 Leu Gly Lys Leu Gln Ala Lys Arg Val Glu Ala Gln Arg Gln Ala Gln
 420 425 430
 Arg Leu Arg Glu Arg Arg Ala Ala Ser Gly Tyr Pro Val Lys Val Pro
 435 440 445
 Leu Glu Val Gln Glu Ala Asp Glu Ala Lys Leu Gln Gln Thr Glu Ala
 450 455 460
 Glu Leu Arg Lys Val Asp Glu Ala Ile Ala Leu Phe Gln Lys Met Leu
 465 470 475 480

<210> 560

517

<211> 96

<212> PRT

<213> Homo sapiens

<400> 560

Ala Cys Leu Glu Arg Cys Gly Ser Trp Arg Pro His Arg Pro Met Thr
 1 5 10 15

Ser Gly Ala Arg Glu Asn Pro Ile Gln Val Pro Arg Ser Ser Leu Glu
 20 25 30

Ala Thr Gly Ala Gln Glu Arg Trp Ala Glu Asp Val Pro Tyr Pro Thr
 35 40 45

Thr Arg Ala Val Ser Leu Pro Pro Ser Leu Gly Val Gly Ser Thr Gly
 50 55 60

Met Ser Ser Ser Arg Phe Leu Gly Ser Leu Gly Lys His Gly Arg Leu
 65 70 75 80

Asp Ser Ser Arg Arg Ala Arg Leu Trp Gly Arg Gly Gly Arg Gly Gly
 85 90 95

<210> 561

<211> 60

<212> PRT

<213> Homo sapiens

<400> 561

Ile Arg His Glu Ser Ser Ile Leu Ser Val Leu Phe Ile Arg Phe Leu
 1 5 10 15

Lys Cys Ala Asp Pro Phe Lys Thr Pro Ala Tyr Leu Cys Asn Lys Glu
 20 25 30

Lys Tyr Ser Lys Ile Leu Pro Ser Phe Ser His Thr Val Leu Lys Met
 35 40 45

Leu Gln Asp Gln Ile Ile Ala His Lys Ile Arg Ser
 50 55 60

<210> 562

<211> 241

<212> PRT

518

<213> Homo sapiens

<400> 562

Ser Ser Met Ala Lys Pro Cys Gly Val Arg Leu Ser Gly Glu Ala Arg
 1 5 10 15
 Lys Gln Val Glu Val Phe Arg Gln Asn Leu Phe Gln Glu Ala Glu Glu
 20 25 30
 Phe Leu Tyr Arg Phe Leu Pro Gln Lys Ile Ile Tyr Leu Asn Gln Leu
 35 40 45
 Leu Gln Glu Asp Ser Leu Asn Val Ala Asp Leu Thr Ser Leu Arg Ala
 50 55 60
 Pro Leu Asp Ile Pro Ile Pro Asp Pro Pro Lys Asp Asp Glu Met
 65 70 75 80
 Glu Thr Asp Lys Gln Glu Lys Lys Glu Val Pro Lys Cys Gly Phe Leu
 85 90 95
 Pro Gly Asn Glu Lys Val Leu Ser Leu Leu Ala Leu Val Lys Pro Glu
 100 105 110
 Val Trp Thr Leu Lys Glu Lys Cys Ile Leu Val Ile Thr Trp Ile Gln
 115 120 125
 His Leu Ile Pro Lys Ile Glu Asp Gly Asn Asp Phe Gly Val Ala Ile
 130 135 140
 Gln Glu Lys Val Leu Glu Arg Val Asn Ala Val Lys Thr Lys Val Glu
 145 150 155 160
 Ala Phe Gln Thr Thr Ile Ser Lys Tyr Phe Ser Glu Arg Gly Asp Ala
 165 170 175
 Val Ala Lys Ala Ser Lys Glu Thr His Val Met Asp Tyr Arg Ala Leu
 180 185 190
 Val His Glu Arg Asp Glu Ala Ala Tyr Gly Glu Leu Arg Ala Met Val
 195 200 205
 Leu Asp Leu Arg Ala Phe Tyr Ala Glu Leu Tyr His Ile Ile Ser Ser
 210 215 220
 Asn Leu Glu Lys Ile Val Asn Pro Lys Gly Glu Glu Lys Pro Ser Met
 225 230 235 240
 Tyr

519

<210> 563
 <211> 200
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (145)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 563

Leu Gly Ser Ile Gln Val Met Gln Ala Val Arg Asn Ala Gly Ser Arg
 1 5 10 15
 Phe Leu Arg Ser Trp Thr Trp Pro Gln Thr Ala Gly Arg Val Val Ala
 20 25 30
 Arg Thr Pro Ala Gly Thr Ile Cys Thr Gly Ala Arg Gln Leu Gln Asp
 35 40 45
 Ala Ala Ala Lys Gln Lys Val Glu Gln Asn Ala Ala Pro Ser His Thr
 50 55 60
 Lys Phe Ser Ile Tyr Pro Pro Ile Pro Gly Glu Glu Ser Ser Leu Arg
 65 70 75 80
 Trp Ala Gly Lys Lys Phe Glu Glu Ile Pro Ile Ala His Ile Lys Ala
 85 90 95
 Ser His Asn Asn Thr Gln Ile Gln Val Val Ser Ala Ser Asn Glu Pro
 100 105 110
 Leu Ala Phe Ala Ser Cys Gly Thr Glu Gly Phe Arg Asn Ala Lys Lys
 115 120 125
 Gly Thr Gly Ile Ala Ala Gln Thr Ala Gly Ile Ala Ala Ala Arg
 130 135 140
 Xaa Lys Gln Lys Gly Val Ile His Ile Arg Val Val Val Lys Gly Leu
 145 150 155 160
 Gly Pro Gly Arg Leu Ser Ala Met His Gly Leu Ile Met Gly Gly Leu
 165 170 175
 Glu Val Ile Ser Ile Thr Asp Asn Thr Pro Ile Pro His Asn Gly Cys
 180 185 190
 Arg Pro Arg Lys Ala Arg Lys Leu
 195 200

520

<210> 564
 <211> 115
 <212> PRT
 <213> Homo sapiens

<400> 564
 Val Arg Leu Val Pro Gly Ala Asp Lys Tyr Asn Asp Asp Ile Arg Lys
 1 5 10 15
 Gly Ile Val Leu Leu Glu Glu Leu Leu Pro Lys Gly Ser Lys Glu Glu
 20 25 30
 Gln Arg Asp Tyr Val Phe Tyr Leu Ala Val Gly Asn Tyr Arg Leu Lys
 35 40 45
 Glu Tyr Glu Lys Ala Leu Lys Tyr Val Arg Gly Leu Leu Gln Thr Glu
 50 55 60
 Pro Gln Asn Asn Gln Ala Lys Glu Leu Glu Arg Leu Ile Asp Lys Ala
 65 70 75 80
 Met Lys Lys Asp Gly Leu Val Gly Met Ala Ile Val Gly Gly Met Ala
 85 90 95
 Leu Gly Val Ala Gly Leu Ala Gly Leu Ile Gly Leu Ala Val Ser Lys
 100 105 110
 Ser Lys Ser
 115

<210> 565
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 565
 Pro Thr Arg Pro Asp Glu His Asp Glu Asn Asn Ala Glu Ala Ser Ala
 1 5 10 15
 Glu Leu Ser Asn Glu Gly Val Met Asn His Arg Ser Glu Glu Glu Arg
 20 25 30
 Val Thr Glu Thr Gln Lys Asn Glu Arg Val Lys Lys Gln Leu Gln Ala
 35 40 45
 Leu Ser Ser Glu Leu Ala Gln Ala Arg Asp Glu Thr Lys Lys Thr Gln

521

50 55 60
 Asn Asp Val Leu His Ala Glu Asn Val Lys Ala Gly Arg Asp Lys Tyr
 65 70 75 80
 Lys Thr Leu Arg Gln Ile Arg Gln Gly Asn Thr Lys Gln Arg Ile Asp
 85 90 95
 Glu Phe Glu Ala Met
 100

<210> 566
 <211> 25
 <212> PRT
 <213> Homo sapiens

<400> 566
 Thr Ala Asp Leu Val Ile Arg Pro Pro Arg Pro Leu Lys Val Leu Gly
 1 5 10 15
 Phe Cys Val Phe Cys Ala Pro Pro Leu
 20 25

<210> 567
 <211> 274
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (182)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (216)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (222)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (224)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (228)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (231)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 567

Ala Ser Pro Glu Val Glu Ala Gly Ala Ala Arg Gln Pro Leu Leu Gly
 1 5 10 15

Val Ala Gly Gly Gln Thr Leu Gly Ala Thr Pro Gly Pro Val Met Asn
 20 25 30

Gly Pro Ala Asp Gly Glu Val Asp Tyr Lys Lys Lys Tyr Arg Asn Leu
 35 40 45

Lys Arg Lys Leu Lys Phe Leu Ile Tyr Glu His Glu Cys Phe Gln Glu
 50 55 60

Glu Leu Arg Lys Ala Gln Arg Lys Leu Leu Lys Val Ser Arg Asp Lys
 65 70 75 80

Ser Phe Leu Leu Asp Arg Leu Leu Gln Tyr Glu Asn Val Asp Glu Asp
 85 90 95

Ser Ser Asp Ser Asp Ala Thr Ala Ser Ser Asp Asn Ser Glu Thr Glu
 100 105 110

Gly Thr Pro Lys Leu Ser Asp Thr Pro Ala Pro Lys Arg Lys Arg Ser
 115 120 125

Pro Pro Leu Gly Gly Ala Pro Ser Pro Ser Ser Leu Ser Leu Pro Pro
 130 135 140

Ser Thr Gly Phe Pro Leu Gln Ala Ser Gly Val Pro Ser Pro Tyr Leu
 145 150 155 160

Ser Ser Leu Ala Ser Ser Arg Tyr Pro Pro Phe Pro Ser Asp Tyr Leu
 165 170 175

Ala Leu Gln Leu Pro Xaa Pro Ser Pro Leu Arg Pro Lys Arg Glu Lys
 180 185 190

Arg Pro Arg Leu Pro Arg Lys Leu Lys Met Ala Val Gly Pro Pro Asp
 195 200 205

523

Cys Pro Val Gly Gly Pro Leu Xaa Phe Pro Gly Arg Gly Xaa Gly Xaa
 210 215 220

Gly Val Gly Xaa Thr Leu Xaa Pro Leu Pro Pro Pro Lys Met Pro Pro
 225 230 235 240

Pro Thr Ile Leu Ser Thr Val Pro Arg Gln Met Phe Ser Asp Ala Gly
 245 250 255

Ser Gly Asp Asp Ala Leu Asp Gly Asp Asp Asp Leu Val Ile Asp Ile
 260 265 270

Pro Glu

<210> 568

<211> 133

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (47)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 568

Ala Arg Gly Asp His Val Arg Ser Arg Glu Thr Gly Arg Gln Ser Ala
 1 5 10 15

Ser Lys Gly Gln Ile Pro Leu Leu Pro Arg Gly Pro Ala Val Pro Gly
 20 25 30

Gly Pro Ser Ala Gln Thr Ala Ala Gln Arg Glu Leu Arg Gly Xaa Val
 35 40 45

Gly Ala Gly Ala Pro Val Tyr Leu Ala Ala Val Leu Glu Tyr Leu Thr
 50 55 60

Ala Glu Ile Leu Glu Leu Ala Gly Asn Ala Ala Arg Asp Asn Lys Lys
 65 70 75 80

Thr Arg Ile Ile Pro Arg His Leu Gln Leu Ala Ile Arg Asn Asp Glu
 85 90 95

Glu Leu Asn Lys Leu Leu Gly Lys Val Thr Ile Ala Gln Gly Gly Val
 100 105 110

Leu Pro Asn Ile Gln Ala Val Leu Leu Pro Lys Lys Thr Glu Ser Gln
 115 120 125

524

Lys Thr Lys Ser Lys
130

<210> 569
<211> 153
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (136)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (137)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (152)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 569
Met Cys Arg Gly Tyr Ala Trp Asn Pro Gly Ile Thr Leu Gln Asn Arg
1 5 10 15
Lys Thr Lys Glu Gly Pro Arg Ala Pro Pro Ser Arg Met Pro Glu Pro
20 25 30
Ala Gly Gly Leu Arg Gly Cys Glu Ala Val Gly Thr Leu Leu Met Lys
35 40 45
Glu Thr Val Phe Ala Leu His Pro Ser Leu Pro Leu Gly Ala Gly Ser
50 55 60
Ser Pro Ser Ala Thr Cys Ser Glu Gly Leu His Leu Arg Gly Glu Gly
65 70 75 80
Trp Gly Lys Ser Pro Pro Val Pro Phe Leu Trp Pro Cys Cys Pro His
85 90 95
Thr Gln Leu Arg Gly Pro Thr Leu Gly Lys Ala Gly Ser Ala Arg Ser
100 105 110
Leu Ser Pro Ile Ser Ala Leu Ser Ala Trp Ile Pro Ala Glu Ala Met
115 120 125

525

Lys Gly Asn Lys Glu Lys Arg Xaa Xaa Lys Lys Lys Lys Lys Lys Lys
 130 135 140

Lys Lys Lys Lys Lys Lys Lys Xaa Pro
 145 150

<210> 570

<211> 327

<212> PRT

<213> Homo sapiens

<400> 570

Pro Gly Ser Pro Arg Arg Cys Asp Ile Ile Ile Ile Ser Gly Arg Lys
 1 5 10 15

Glu Lys Cys Glu Ala Ala Lys Glu Ala Leu Glu Ala Leu Val Pro Val
 20 25 30

Thr Ile Glu Val Glu Val Pro Phe Asp Leu His Arg Tyr Val Ile Gly
 35 40 45

Gln Lys Gly Ser Gly Ile Arg Lys Met Met Asp Glu Phe Glu Val Asn
 50 55 60

Ile His Val Pro Ala Pro Glu Leu Gln Ser Asp Ile Ile Ala Ile Thr
 65 70 75 80

Gly Leu Ala Ala Asn Leu Asp Arg Ala Lys Ala Gly Leu Leu Glu Arg
 85 90 95

Val Lys Glu Leu Gln Ala Glu Gln Glu Asp Arg Ala Leu Arg Ser Phe
 100 105 110

Lys Leu Ser Val Thr Val Asp Pro Lys Tyr His Pro Lys Ile Ile Gly
 115 120 125

Arg Lys Gly Ala Val Ile Thr Gln Ile Arg Leu Glu His Asp Val Asn
 130 135 140

Ile Gln Phe Pro Asp Lys Asp Asp Gly Asn Gln Pro Gln Asp Gln Ile
 145 150 155 160

Thr Ile Thr Gly Tyr Glu Lys Asn Thr Glu Ala Ala Arg Asp Ala Ile
 165 170 175

Leu Arg Ile Val Gly Glu Leu Glu Gln Met Val Ser Glu Asp Val Pro
 180 185 190

Leu Asp His Arg Val His Ala Arg Ile Ile Gly Ala Arg Gly Lys Ala

526

| | | |
|---|-----|---------|
| 195 | 200 | 205 |
| Ile Arg Lys Ile Met Asp Glu Phe Lys Val Asp Ile Arg Phe Pro Gln | | |
| 210 | 215 | 220 |
| Ser Gly Ala Pro Asp Pro Asn Cys Val Thr Val Thr Gly Leu Pro Glu | | |
| 225 | 230 | 235 240 |
| Asn Val Glu Glu Ala Ile Asp His Ile Leu Asn Leu Glu Glu Glu Tyr | | |
| 245 | 250 | 255 |
| Leu Ala Asp Val Val Asp Ser Glu Ala Leu Gln Val Tyr Met Lys Pro | | |
| 260 | 265 | 270 |
| Pro Ala His Glu Glu Ala Lys Ala Pro Ser Arg Gly Phe Val Val Arg | | |
| 275 | 280 | 285 |
| Asp Ala Pro Trp Thr Ala Ser Ser Ser Glu Lys Ala Pro Asp Met Ser | | |
| 290 | 295 | 300 |
| Ser Ser Glu Glu Phe Pro Ser Phe Gly Ala Gln Val Ala Pro Lys Thr | | |
| 305 | 310 | 315 320 |
| Leu Pro Trp Gly Pro Lys Arg | | |
| 325 | | |

<210> 571

<211> 166

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (9)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (12)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 571

| |
|---|
| Gly Asn Ser Arg Val Asp Pro Arg Xaa Arg Gly Xaa Ala His Thr Cys |
| 1 5 10 15 |

| |
|---|
| Ala Pro Cys Pro Ala Pro Gly Pro Leu Ala Gly Arg Ala Val Ser Gly |
| 20 25 30 |

His Gly Ser Leu Pro Pro Asp Arg Arg Ala Pro Ser Ala Leu Ser Ser

527

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      35              40              45
Pro Ala Asp Glu Gly Glu Arg Arg Arg Pro Asp Leu Asp Glu Ile His
  50              55              60
Arg Glu Leu Arg Pro Gln Gly Ser Ala Arg Pro Gln Pro Asp Pro Asn
  65              70              75              80
Ala Glu Phe Asp Pro Asp Leu Pro Gly Gly Gly Leu His Arg Cys Leu
      85              90              95
Ala Cys Ala Arg Tyr Phe Ile Asp Ser Thr Asn Leu Lys Thr His Phe
      100              105              110
Arg Ser Lys Asp His Lys Lys Arg Leu Lys Gln Leu Ser Val Glu Pro
      115              120              125
Tyr Ser Gln Glu Glu Ala Glu Arg Ala Ala Gly Met Gly Ser Tyr Val
      130              135              140
Pro Pro Arg Arg Leu Ala Val Pro Thr Glu Val Ser Thr Glu Val Pro
      145              150              155              160
Glu Met Asp Thr Ser Thr
      165

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<210> 572

<211> 113

<212> PRT

<213> Homo sapiens

<400> 572

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Gln Ser Ser Thr Phe His Pro Ala Pro Ala Phe Gly Ala Thr Val Ala
  1              5              10              15
Ala Phe His Arg Arg Ala Ala Leu Arg Ala Pro Glu Pro Ala Met Ser
      20              25              30
Gly Pro Asn Gly Asp Leu Gly Met Pro Val Glu Ala Gly Ala Glu Gly
      35              40              45
Glu Glu Asp Gly Phe Gly Glu Ala Glu Tyr Ala Ala Ile Asn Ser Met
      50              55              60
Leu Asp Gln Ile Asn Ser Cys Leu Asp His Leu Glu Glu Lys Asn Asp
      65              70              75              80
His Leu His Ala Arg Leu Gln Glu Leu Leu Glu Ser Asn Arg Gln Thr
      85              90              95

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528

Arg Leu Glu Phe Gln Gln Gln Leu Gly Glu Ala Pro Ser Asp Ala Ser
 100 105 110

Pro

<210> 573

<211> 99

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (27)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (37)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (38)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 573

Gly Ser Gly Ser Ser Arg Asp Leu His Lys Ala Leu Trp Glu Ala Gly
 1 5 10 15

Trp Glu Thr Val Glu Gly Gly Cys Pro Leu Xaa Pro Arg Arg His Arg
 20 25 30

Ile Trp Ala Leu Xaa Xaa Ala Phe Leu Pro Glu Tyr Ala Ala Ile Asn
 35 40 45

Ser Met Leu Asp Gln Ile Asn Ser Cys Leu Asp His Leu Glu Glu Lys
 50 55 60

Asn Asp His Leu His Ala Arg Leu Gln Glu Leu Leu Glu Ser Asn Arg
 65 70 75 80

Gln Thr Arg Leu Glu Phe Gln Gln Gln Leu Gly Glu Ala Pro Ser Asp
 85 90 95

Ala Ser Pro

<210> 574
 <211> 197
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (97)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (124)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (129)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 574
 Arg Trp Ala Arg Val Glu Ala Ala Val Met Glu Gly Ala Gly Ala Gly
 1 5 10 15
 Ser Gly Phe Arg Lys Glu Leu Val Ser Arg Leu Leu His Leu His Phe
 20 25 30
 Lys Asp Asp Lys Thr Lys Val Ser Gly Asp Ala Leu Gln Leu Met Val
 35 40 45
 Glu Leu Leu Lys Val Phe Val Val Glu Ala Ala Val Arg Gly Val Arg
 50 55 60
 Gln Ala Gln Ala Glu Asp Ala Leu Arg Val Asp Val Asp Gln Leu Glu
 65 70 75 80
 Lys Val Leu Arg Ser Cys Ser Gly Leu Leu Gly Ile Ser Ala Val Ala
 85 90 95
 Xaa Ala Thr Pro Arg Gly Ala Pro Gly Pro Gln Lys Gln Ala Leu Cys
 100 105 110
 Phe Gln Arg Pro Leu Ile Arg Gly Arg Glu Gly Xaa Glu Gly Phe Gly
 115 120 125
 Xaa Asp Ser Asn Lys Ile Ser Gly Ser Leu Gln Pro Val Gln Lys Gly
 130 135 140
 Gln Asp Cys Ser Ala Leu Arg Ala Leu Glu Cys Pro Val Gly Thr Leu

530

145 150 155 160
 Val Trp Glu Gly Ala Ala Pro Gly Glu Ser Leu Pro Leu Leu Pro Gly
 165 170 175
 Thr Ile Val Cys Met Pro Pro Gly Val Leu Gln Ala Gly Ala Gly Lys
 180 185 190
 Gly Leu Ala Ser Arg
 195

<210> 575
 <211> 47
 <212> PRT
 <213> Homo sapiens

<400> 575
 Leu Pro Met Val Asp Leu Met Glu Lys Leu Asn Ile Phe His Tyr Ala
 1 5 10 15
 Leu Gln Asn Thr Val Tyr Val Ser Ala Ser Leu Gly Asn Gly Arg Gly
 20 25 30
 Gln Lys Lys Val Thr Phe Asn Leu Cys Ile Phe Ala Lys Pro Tyr
 35 40 45

<210> 576
 <211> 115
 <212> PRT
 <213> Homo sapiens

<400> 576
 Trp Ser Arg Thr Ser Gln Pro Leu Pro Ser Thr Val Gly Cys Pro Arg
 1 5 10 15
 Arg Arg Gly Phe Lys Asp Phe Gln Arg Arg Ile Leu Val Ala Thr Asn
 20 25 30
 Leu Phe Gly Arg Gly Met Asp Ile Glu Arg Val Asn Ile Ala Phe Asn
 35 40 45
 Tyr Asp Met Pro Glu Asp Ser Asp Thr Tyr Leu His Arg Val Ala Arg
 50 55 60
 Ala Gly Arg Phe Gly Thr Lys Gly Leu Ala Ile Thr Phe Val Ser Asp
 65 70 75 80

Glu Asn Asp Ala Lys Ile Leu Asn Asp Val Gln Asp Arg Phe Glu Val
 85 90 95
 Asn Ile Ser Glu Leu Pro Asp Glu Ile Asp Ile Ser Ser Tyr Ile Glu
 100 105 110
 Gln Thr Arg
 115

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<210> 577
<211> 346
<212> PRT
<213> Homo sapiens
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<220>  
<221> SITE  
<222> (37)  
<223> Xaa equals any of the naturally occurring L-amino acids
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<400> 577
Val Thr Ser Cys Val Ala Leu Leu Pro Ala Arg Arg Met Thr Tyr Thr
1 5 10 15

Thr Glu Thr Ala Leu Leu Asn Trp Ser Thr Cys Gln Met Val Leu Arg
20 25 30

Gly Ala Glu Thr Xaa Gly Cys Val Ile Val Ser Ala Ala Lys Ala Gln
35 40 45

Leu Leu Gln Cys Gln His His Pro Ala Trp Tyr Gly Asp Thr Leu Lys
50 55 60

Gln Lys Thr Ser Trp Thr Cys Leu Leu Asp Gly Met Gln Tyr Phe Ala
65 70 75 80

Thr Thr Glu Ser Ser Pro Thr Glu Gln Asp Gly Arg Gln Leu Trp Leu
85 90 95

Glu Val Lys Asn Ile Glu Glu His Arg Gln Arg Ser Leu Asp Ser Val
100 105 110

Gln Glu Leu Met Glu Ser Gly Gln Ala Val Gly Gly Met Val Thr Thr
 . 115 120 125

Thr Thr Asp Trp Asn Gln Pro Ala Glu Ala Gln Gln Ala Gln Gln Val
130 135 140

Gln Arg Ile Ile Ser Arg Cys Asn Cys Arg Met Tyr Tyr Ile Ser Tyr
145 150 155 160

532

Ser His Asp Ile Asp Pro Glu Leu Ala Thr Gln Ile Lys Pro Pro Glu
 165 170 175
 Val Leu Glu Asn Gln Glu Lys Glu Asp Leu Leu Lys Lys Gln Glu Gly
 180 185 190
 Ala Val Asp Thr Phe Thr Leu Ile His His Glu Leu Glu Ile Ser Thr
 195 200 205
 Asn Pro Ala Gln Tyr Ala Met Ile Leu Asp Ile Val Asn Asn Leu Leu
 210 215 220
 Leu His Val Glu Pro Lys Arg Lys Glu His Ser Glu Lys Lys Gln Arg
 225 230 235 240
 Val Arg Phe Gln Leu Glu Ile Ser Ser Asn Pro Glu Glu Gln Arg Ser
 245 250 255
 Ser Ile Leu His Leu Gln Glu Ala Val Arg Gln His Val Ala Gln Ile
 260 265 270
 Arg Gln Leu Glu Lys Gln Met Tyr Ser Ile Met Lys Ser Leu Gln Asp
 275 280 285
 Asp Ser Lys Asn Glu Asn Leu Leu Asp Leu Asn Gln Lys Leu Gln Leu
 290 295 300
 Gln Leu Asn Gln Glu Lys Ala Asn Leu Gln Leu Glu Ser Glu Glu Leu
 305 310 315 320
 Asn Ile Leu Ile Arg Cys Phe Lys Asp Phe Gln Leu Gln Arg Ala Asn
 325 330 335
 Lys Met Glu Leu Arg Lys His Lys Lys Met
 340 345

<210> 578

<211> 91

<212> PRT

<213> Homo sapiens

<400> 578

Arg His Glu Gly His Leu Gly Ser Gly Arg Asn Gly Gly Gly Ser Met
 1 5 10 15
 Asn Ala Pro Pro Ala Phe Glu Ser Phe Leu Leu Phe Glu Gly Glu Lys
 20 25 30

533

Ile Thr Ile Asn Lys Asp Thr Lys Val Pro Asn Ala Cys Leu Phe Thr
35 40 45

Ile Asn Lys Glu Asp His Thr Leu Gly Asn Ile Ile Lys Ser Arg Ala
50 55 60

Cys Phe Pro Phe Ala Phe Cys Arg Asp Cys Gln Phe Pro Glu Ala Ser
65 70 75 80

Pro Ala Thr Leu Pro Val Gln Pro Ala Glu Leu
85 90

<210> 579

<211> 331

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (18)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (20)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (300)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (311)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (313)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (320)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (325)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 579

Gly Arg Pro Thr Arg Pro Gly Gly Leu Gly Ser Gly Val Leu Ala Leu
 1 5 10 15

Ala Xaa Gly Xaa Pro Ala Arg Leu Ala Gly Thr Val His Glu Val Gly
 20 25 30

Asp Ala Pro Arg Arg Ala Pro Asp Gln Ala Ala Glu Ile Gly Ser Arg
 35 40 45

Gly Ser Thr Lys Ala Gln Gly Pro Gln Gln Gln Pro Gly Ser Glu Gly
 50 55 60

Pro Ser Tyr Ala Lys Lys Val Ala Leu Trp Leu Ala Gly Leu Leu Gly
 65 70 75 80

Ala Gly Gly Thr Val Ser Val Val Tyr Ile Phe Gly Asn Asn Pro Val
 85 90 95

Asp Glu Asn Gly Ala Lys Ile Pro Asp Glu Phe Asp Asn Asp Pro Ile
 100 105 110

Leu Val Gln Gln Leu Arg Arg Thr Tyr Lys Tyr Phe Lys Asp Tyr Arg
 115 120 125

Gln Met Ile Ile Glu Pro Thr Ser Pro Cys Leu Leu Pro Asp Pro Leu
 130 135 140

Gln Glu Pro Tyr Tyr Gln Pro Pro Tyr Thr Leu Val Leu Glu Leu Thr
 145 150 155 160

Gly Val Leu Leu His Pro Glu Trp Ser Leu Ala Thr Gly Trp Arg Phe
 165 170 175

Lys Lys Arg Pro Gly Ile Glu Thr Leu Phe Gln Gln Leu Ala Pro Leu
 180 185 190

Tyr Glu Ile Val Ile Phe Thr Ser Glu Thr Gly Met Thr Ala Phe Pro
 195 200 205

Leu Ile Asp Ser Val Asp Pro His Gly Phe Ile Ser Tyr Arg Leu Phe
 210 215 220

Arg Asp Ala Thr Arg Tyr Met Asp Gly His His Val Lys Asp Ile Ser
 225 230 235 240

Cys Leu Asn Arg Asp Pro Ala Arg Val Val Val Val Asp Cys Lys Lys
 245 250 255

Glu Ala Phe Arg Leu Gln Pro Tyr Asn Gly Val Ala Leu Arg Pro Trp
260 265 270

Asp Gly Asn Ser Asp Asp Arg Val Leu Leu Asp Leu Ser Ala Phe Leu
275 280 285

Lys Thr Ile Ala Leu Asn Gly Val Gly Gly Arg Xaa Glu Pro Cys Trp
290 295 300

Glu His Tyr Ala Leu Gly Xaa Asp Xaa Pro Arg Trp Ala Ala Phe Xaa
305 310 315 320

Asn Ser Gly Lys Xaa Gly Leu Glu Ala Gly Arg
325 330

<210> 580

<211> 374

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (235)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (285)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (307)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (319)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (324)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (341)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (359)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 580

Pro Ser Thr Val Arg Asn Ser Arg Val Asp Pro Arg Val Arg Pro Arg
1 5 10 15

Val Arg Ala Gly Val Ala Ala Leu Ala Thr Val Gly Val Ala Ser Gly
20 25 30

Pro Gly Pro Gly Arg Pro Gly Pro Leu Gln Asp Glu Thr Leu Gly Val
35 40 45

Ala Ser Val Pro Ser Gln Trp Arg Ala Val Gln Gly Ile Arg Gly Glu
50 55 60

Thr Lys Ser Cys Gln Thr Ala Ser Ile Ala Thr Ala Ser Ala Ser Ala
65 70 75 80

Gln Ala Arg Asn His Val Asp Ala Gln Val Gln Thr Glu Ala Pro Val
85 90 95

Pro Val Ser Val Gln Pro Pro Ser Gln Tyr Asp Ile Pro Arg Leu Ala
100 105 110

Ala Phe Leu Arg Arg Val Glu Ala Met Val Ile Arg Glu Leu Asn Lys
115 120 125

Asn Trp Gln Ser His Ala Phe Asp Gly Phe Glu Val Asn Trp Thr Glu
130 135 140

Gln Gln Gln Met Val Ser Cys Leu Tyr Thr Leu Gly Tyr Pro Pro Ala
145 150 155 160

Gln Ala Gln Gly Leu His Val Thr Ser Ile Ser Trp Asn Ser Thr Gly
165 170 175

Ser Val Val Ala Cys Ala Tyr Gly Arg Leu Asp His Gly Asp Trp Ser
180 185 190

Thr Leu Lys Ser Phe Val Cys Ala Trp Asn Leu Asp Arg Arg Asp Leu
195 200 205

Arg Pro Gln Gln Pro Ser Ala Val Val Glu Val Pro Ser Ala Val Leu
210 215 220

Cys Leu Ala Phe His Pro Thr Gln Pro Ser Xaa Val Ala Gly Gly Leu

537

225 230 235 240
 Tyr Ser Gly Glu Val Leu Val Trp Asp Leu Ser Arg Leu Glu Asp Pro
 245 250 255
 Leu Leu Trp Arg Thr Gly Leu Thr Asp Asp Thr His Thr Asp Pro Val
 260 265 270
 Ser Gln Val Val Trp Leu Pro Glu Pro Gly His Ser Xaa Arg Phe Gln
 275 280 285
 Val Leu Ser Val Ala Thr Asp Gly Lys Val Leu Leu Trp Gln Gly Ile
 290 295 300
 Gly Val Xaa Gln Leu Gln Phe Thr Glu Gly Phe Ala Trp Phe Xaa Gln
 305 310 315 320
 Gln Leu Pro Xaa Ser Thr Lys Leu Lys Lys His Pro Arg Gly Arg Pro
 325 330 335
 Arg Trp Ala Pro Xaa Gln Ala Phe Phe Gln Phe Asp Leu Arg Phe Ser
 340 345 350
 Phe Trp Gln Glu Ala Val Xaa Val Gln Phe Ser Trp His Trp Arg Ala
 355 360 365
 Ala Leu Arg Gly Ala His
 370

<210> 581

<211> 94

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (80)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (90)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 581

Cys Pro Asp Gln Asn Gly Trp Ala Ser Phe Gly Ala Pro Leu Ser Ala
 1 5 10 15

Gly Gly Gln Pro Cys Tyr Leu Leu Asp Ile Gly Cys Gly Ser Gly Leu

538

| | | |
|---|----|----|
| 20 | 25 | 30 |
| Ser Gly Asp Tyr Leu Ser Asp Glu Gly His Tyr Trp Val Gly Ile Asp | | |
| 35 | 40 | 45 |
| Ile Ser Pro Ala Met Leu Asp Ala Ala Leu Asp Arg Asp Thr Glu Gly | | |
| 50 | 55 | 60 |
| Asp Leu Leu Leu Gly Asp Met Gly Gln Gly Ile Pro Phe Lys Pro Xaa | | |
| 65 | 70 | 75 |
| 80 | | |
| Ser Leu Met Asp Val Ser Ala Phe Cys Xaa Ser Val Ala Leu | | |
| 85 | 90 | |

<210> 582
 <211> 163
 <212> PRT
 <213> Homo sapiens

| |
|--|
| <400> 582 |
| Pro Thr Arg Pro Ala Ala Gly Gly Ala Glu Arg Ile Ala Gly Ser Ala |
| 1 5 10 15 |
| Met Ser Ser Glu Pro Pro Pro Pro Pro Gln Pro Pro Thr His Gln Ala |
| 20 25 30 |
| Ser Val Gly Leu Leu Asp Thr Pro Arg Ser Arg Glu Arg Ser Pro Ser |
| 35 40 45 |
| Pro Leu Arg Gly Asn Val Val Pro Ser Pro Leu Pro Thr Arg Arg Thr |
| 50 55 60 |
| Arg Thr Phe Ser Ala Thr Val Arg Ala Ser Gln Gly Pro Val Tyr Lys |
| 65 70 75 80 |
| Gly Val Cys Lys Cys Phe Cys Arg Ser Lys Gly His Gly Phe Ile Thr |
| 85 90 95 |
| Pro Ala Asp Gly Gly Pro Asp Ile Phe Leu His Ile Ser Asp Val Glu |
| 100 105 110 |
| Gly Glu Tyr Val Pro Val Glu Gly Asp Glu Val Thr Tyr Lys Met Cys |
| 115 120 125 |
| Ser Ile Pro Pro Lys Asn Glu Lys Leu Gln Ala Val Glu Val Val Ile |
| 130 135 140 |
| Thr His Leu Ala Pro Gly Thr Lys His Glu Thr Trp Ser Gly His Val |
| 145 150 155 160 |

Ile Ser Ser

<210> 583
<211> 293
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (52)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (53)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (150)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (171)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (207)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (254)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 583
Leu Leu Gly Pro Asn Leu Thr Met Gly Ser Gln Pro Gly Arg Ile Pro
1 5 10 15

Asp Leu Leu Glu Lys Gly Glu Arg Leu Pro Gln Pro Pro Ile Cys Thr

540

| | | |
|---|-----|-----|
| 20 | 25 | 30 |
| Ile Asp Val Tyr Met Ile Met Val Lys Cys Trp Met Ile Asp Ser Glu | | |
| 35 | 40 | 45 |
| Cys Arg Pro Xaa Xaa Arg Glu Leu Val Xaa Glu Phe Ser Arg Met Ala | | |
| 50 | 55 | 60 |
| Arg Asp Pro Gln Arg Phe Val Val Ile Gln Asn Glu Asp Leu Gly Pro | | |
| 65 | 70 | 75 |
| Ala Ser Pro Leu Asp Ser Thr Phe Tyr Arg Ser Leu Leu Glu Asp Asp | | |
| 85 | 90 | 95 |
| Asp Met Gly Asp Leu Val Asp Ala Glu Glu Tyr Leu Val Pro Gln Gln | | |
| 100 | 105 | 110 |
| Gly Phe Phe Cys Pro Asp Pro Ala Pro Gly Ala Gly Gly Met Val His | | |
| 115 | 120 | 125 |
| His Arg His Arg Ser Ser Ser Thr Arg Ser Gly Gly Gly Asp Leu Thr | | |
| 130 | 135 | 140 |
| Leu Gly Leu Glu Pro Xaa Glu Arg Gly Gly Pro Gln Val Ser Thr Gly | | |
| 145 | 150 | 155 |
| Thr Leu Arg Arg Ala Gly Ser Asp Val Phe Xaa Gly Asp Leu Gly Met | | |
| 165 | 170 | 175 |
| Gly Ala Ala Lys Gly Leu Gln Ser Leu Pro Thr His Asp Pro Ser Pro | | |
| 180 | 185 | 190 |
| Leu Gln Arg Tyr Ser Glu Asp Pro Thr Val Pro Leu Pro Ser Xaa Thr | | |
| 195 | 200 | 205 |
| Asp Gly Tyr Val Ala Pro Leu Thr Cys Ser Pro Gln Pro Glu Tyr Val | | |
| 210 | 215 | 220 |
| Asn Gln Pro Asp Val Arg Pro Gln Pro Pro Ser Pro Arg Glu Gly Pro | | |
| 225 | 230 | 235 |
| Leu Pro Ala Ala Arg Pro Ala Gly Ala Thr Leu Glu Arg Xaa Lys Thr | | |
| 245 | 250 | 255 |
| Leu Ser Pro Gly Lys Asn Gly Val Val Lys Glu Phe Leu Pro Leu Gly | | |
| 260 | 265 | 270 |
| Val Pro Trp Arg Thr Pro Ser Ile Asp Thr Pro Gly Glu Gly Ala Cys | | |
| 275 | 280 | 285 |
| Pro Ser Ala Pro Pro | | |

290

<210> 584

<211> 132

<212> PRT

<213> Homo sapiens

<400> 584

Gly Gly Ala Gln Pro Gly Met Glu Gly Ala Ala Ala Thr Val His Leu
1 5 10 15

Ile Ser Gln Trp Ala Val Glu Pro Asn Ala Arg Val Gly Pro Leu Leu
20 25 30

Glu Val Glu Ala Ala Ala Ala Asp His His Glu Ala Ala Ala Gly Ala
35 40 45

Gly Ser Ala Val Glu Lys Ile Cys Ile Asp Lys Gly Leu Thr Asp Glu
50 55 60

Ser Glu Ile Leu Arg Phe Leu Gln His Gly Thr Leu Val Gly Leu Leu
65 70 75 80

Pro Val Pro His Pro Ile Leu Ile Arg Lys Tyr Gln Ala Asn Ser Gly
85 90 95

Thr Ala Met Trp Phe Arg Thr Tyr Met Trp Gly Val Ile Tyr Leu Arg
100 105 110

Asn Val Asp Pro Pro Val Trp Tyr Asp Thr Asp Val Lys Leu Phe Glu
115 120 125

Ile Gln Arg Val
130

<210> 585

<211> 218

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (54)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (92)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <220>
 <221> SITE
 <222> (117)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <220>
 <221> SITE
 <222> (140)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <220>
 <221> SITE
 <222> (141)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <220>
 <221> SITE
 <222> (188)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <220>
 <221> SITE
 <222> (199)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <220>
 <221> SITE
 <222> (200)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <400> 585
 Arg Glu Arg Cys Arg Arg Glu Ala Leu Arg Gly Ser Arg Leu Cys Pro
 1 5 10 15
 Ala Thr Pro Pro Ser Ala Leu Gly Ser Gln Asp Gly Ser Arg Thr Arg
 20 25 30
 Asp Arg Leu Gly Ala Ala Gly Trp Pro Gly Leu Val Val Gly Leu Cys
 35 40 45
 Thr Pro Ala Ala Gly Xaa Gln Arg Asp Leu Leu His Arg Arg Gly Gly
 50 55 60
 Thr Ala Ser Phe Gly Lys Ser Phe Ala Gln Lys Ser Gly Tyr Phe Leu
 65 70 75 80
 Cys Leu Ser Ser Leu Gly Ser Leu Glu Asn Pro Xaa Glu Asn Val Val
 85 90 95

543

Ala Asp Ile Gln Ile Val Val Asp Lys Ser Pro Leu Pro Leu Gly Phe
 100 105 110

Ser Pro Val Cys Xaa Pro Met Asp Ser Lys Ala Ser Val Ser Lys Lys
 115 120 125

Lys Arg Met Cys Val Lys Leu Leu Pro Leu Gly Xaa Xaa Asp Thr Ala
 130 135 140

Val Phe Asp Val Arg Leu Ser Gly Lys Thr Lys Thr Val Pro Gly Tyr
 145 150 155 160

Leu Arg Ile Gly Asp Met Gly Gly Phe Ala Ile Trp Cys Lys Lys Gly
 165 170 175

Gln Gly Pro Glu Ala Ser Cys Pro Lys Pro Arg Xaa Pro Gln Pro Gly
 180 185 190

Thr Cys Lys Gly Phe Ser Xaa Xaa Ala Ala Ser Gln Pro Lys Leu Arg
 195 200 205

Ala Gly Leu Leu Gly Ser Arg Thr Ser Val
 210 215

<210> 586

<211> 233

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (41)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 586

Ala Arg Gly Glu Met Glu Gly Arg Gln Val Leu Glu Val Lys Met Gln
 1 5 10 15

Val Glu Tyr Met Ser Phe Ser Ala His Ala Asp Ala Lys Gly Ile Met
 20 25 30

Gln Leu Val Gly Gln Ala Glu Pro Xaa Ser Val Leu Leu Val His Gly
 35 40 45

Glu Ala Lys Lys Met Glu Phe Leu Lys Gln Lys Ile Glu Gln Glu Leu
 50 55 60

Arg Val Asn Cys Tyr Met Pro Ala Asn Gly Glu Thr Val Thr Leu Pro

544

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65              70              75              80
Thr Ser Pro Ser Ile Pro Val Gly Ile Ser Leu Gly Leu Leu Lys Arg
      85              90              95
Glu Met Ala Gln Gly Leu Leu Pro Glu Ala Lys Lys Pro Arg Leu Leu
      100             105             110
His Gly Thr Leu Ile Met Lys Asp Ser Asn Phe Arg Leu Val Ser Ser
      115             120             125
Glu Gln Ala Leu Lys Glu Leu Gly Leu Ala Glu His Gln Leu Arg Phe
      130             135             140
Thr Cys Arg Val His Leu His Asp Thr Arg Lys Glu Gln Glu Thr Ala
      145             150             155             160
Leu Arg Val Tyr Ser His Leu Lys Ser Val Leu Lys Asp His Cys Val
      165             170             175
Gln His Leu Pro Asp Gly Ser Val Thr Val Glu Ser Val Leu Leu Gln
      180             185             190
Ala Ala Ala Pro Ser Glu Asp Pro Gly Thr Lys Val Leu Leu Val Ser
      195             200             205
Trp Thr Tyr Gln Asp Glu Glu Leu Gly Ser Phe Leu Thr Ser Leu Leu
      210             215             220
Lys Lys Gly Leu Pro Gln Ala Pro Ser
      225             230

```

<210> 587

<211> 116

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (100)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 587

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Gly Pro Leu Ser His His Ile Arg Ala Gln Leu Ser Lys Met Leu Leu
  1              5              10              15

```

```

Ala Arg Lys Gln Ile Leu Cys Val Asn Val Lys Asn Phe Ala Val Ile
      20              25              30

```



```
<210> 588
<211> 133
<212> PRT
<213> Homo sapiens
```

```

<400> 588
Ala Arg Ala Ala Val Gly Arg Thr Ala Gly Val Arg Thr Trp Ala Pro
  1              5              10              15

Leu Ala Met Ala Ala Lys Val Asp Leu Ser Thr Ser Thr Asp Trp Lys
      20              25              30

Glu Ala Lys Ser Phe Leu Lys Gly Leu Ser Asp Lys Gln Arg Glu Glu
      35              40              45

His Tyr Phe Cys Lys Asp Phe Val Arg Leu Lys Lys Ile Pro Thr Trp
      50              55              60

Lys Glu Met Ala Lys Gly Val Ala Val Lys Val Glu Glu Pro Arg Tyr
  65              70              75              80

Lys Lys Asp Lys Gln Leu Asn Glu Lys Ile Ser Leu Leu Arg Ser Asp
      85              90              95

Ile Thr Lys Leu Glu Val Asp Ala Ile Val Asn Ala Ala Asn Ser Ser
      100              105              110

Pro Pro Pro Arg Ser Leu Ile Lys Asp Leu Arg Cys Gly Lys Lys Lys
      115              120              125

Lys Lys Lys Lys Lys

```

546

130

<210> 589

<211> 163

<212> PRT

<213> Homo sapiens

<400> 589

Arg His Arg Gly Gln Pro Leu Arg Gln Thr Arg Ala Ser Ser Ser Pro
 1 5 10 15

Gln Leu Ala Gly Arg Ser Ser Ser Val Leu Pro Ala Ala Ala Gln Pro
 20 25 30

Cys Thr Pro Thr Met Asp Val Phe Lys Lys Gly Phe Ser Ile Ala Lys
 35 40 45

Glu Gly Val Val Gly Ala Val Glu Lys Thr Lys Gln Gly Val Thr Glu
 50 55 60

Ala Ala Glu Lys Thr Lys Glu Gly Val Met Tyr Val Gly Ala Lys Thr
 65 70 75 80

Lys Glu Asn Val Val Gln Ser Val Thr Ser Val Ala Glu Lys Thr Lys
 85 90 95

Glu Gln Ala Asn Ala Val Ser Glu Ala Val Val Ser Ser Val Asn Thr
 100 105 110

Val Ala Thr Lys Thr Val Glu Glu Ala Glu Asn Ile Ala Val Thr Ser
 115 120 125

Gly Val Val Arg Lys Glu Asp Leu Arg Pro Ser Ala Pro Gln Gln Glu
 130 135 140

Gly Glu Ala Ser Lys Glu Lys Glu Glu Val Ala Glu Glu Ala Gln Ser
 145 150 155 160

Gly Gly Asp

<210> 590

<211> 59

<212> PRT

<213> Homo sapiens

<400> 590

547

Arg Ala Leu Leu Cys Leu Gly His His Pro Leu Leu Ala Gln Gly Val
 1 5 10 15
 Pro Ala Leu Ser Asp Met Arg Leu Pro Thr Leu Leu Pro Ser Ser Pro
 20 25 30
 Trp Pro Pro Leu Ala Cys Pro Pro Val Leu Leu His Gln Pro His Cys
 35 40 45
 Pro Pro Ser Ala Pro Pro Thr Leu Trp Ser Phe
 50 55

<210> 591

<211> 116

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (31)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 591

Val His Ala Glu Ala Gly Arg Leu Cys His Gly Asp Cys Pro Arg Leu
 1 5 10 15
 Cys Arg Pro Arg Gln Arg Ser Ala Pro Val Gln Val Tyr Thr Xaa Arg
 20 25 30
 Gln Ala Ala Leu His Gly Arg Pro Gln Arg Asp Pro Cys Val Gly Gly
 35 40 45
 Pro Arg Pro Leu Arg Cys Ser Arg Asp Cys Gly Gly Gly His Gln Arg
 50 55 60
 Leu Val Met Pro Gly Thr Trp Thr Gln Ala Trp Gln Arg Arg Gln Val
 65 70 75 80
 Val Asn Gly Leu Met Leu Gly Gln Ala Arg Ile His Val Asn Arg Leu
 85 90 95
 Glu Gln Ala Val Val Asn Leu Ala Pro Cys Glu Tyr Phe His Thr Cys
 100 105 110
 Cys Pro Phe Ala
 115

<210> 592
 <211> 290
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (30)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (239)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 592
 Arg Arg Ser Leu Asn Thr His Gly Ser Gly Val Ser Val Cys Leu Gln
 1 5 10 15

Ser Leu Thr Leu Leu Ala Thr Leu Cys Pro Gly Asp Gln Xaa Ser Leu
 20 25 30

Gly Leu Leu Thr Pro Cys Tyr Ser Gly Ser Glu Pro Ser Gly Thr Phe
 35 40 45

Gly Pro Val Asn Pro Ser Leu Asn Asn Thr Tyr Glu Phe Met Ser Thr
 50 55 60

Phe Phe Leu Glu Val Ser Ser Val Phe Pro Asp Phe Tyr Leu His Leu
 65 70 75 80

Gly Gly Asp Glu Val Asp Phe Thr Cys Trp Lys Ser Asn Pro Glu Ile
 85 90 95

Gln Asp Phe Met Arg Lys Lys Gly Phe Gly Glu Asp Phe Lys Gln Leu
 100 105 110

Glu Ser Phe Tyr Ile Gln Thr Leu Leu Asp Ile Val Ser Ser Tyr Gly
 115 120 125

Lys Gly Tyr Val Val Trp Gln Glu Val Phe Asp Asn Lys Val Lys Ile
 130 135 140

Gln Pro Asp Thr Ile Ile Gln Val Trp Arg Glu Asp Ile Pro Val Asn
 145 150 155 160

Tyr Met Lys Glu Leu Glu Leu Val Thr Lys Ala Gly Phe Arg Ala Leu
 165 170 175

Leu Ser Ala Pro Trp Tyr Leu Asn Arg Ile Ser Tyr Gly Pro Asp Trp
 180 185 190

549

Lys Asp Phe Tyr Val Val Glu Pro Leu Ala Phe Glu Gly Thr Pro Glu
 195 200 205

Gln Lys Ala Leu Val Ile Gly Gly Glu Ala Cys Met Trp Gly Glu Tyr
 210 215 220

Val Asp Asn Thr Asn Leu Val Pro Arg Leu Trp Pro Arg Ala Xaa Ala
 225 230 235 240

Val Ala Glu Arg Leu Trp Ser Asn Lys Leu Thr Ser Asp Leu Thr Phe
 245 250 255

Ala Tyr Glu Arg Leu Ser His Phe Arg Cys Glu Leu Leu Arg Arg Gly
 260 265 270

Val Gln Ala Gln Pro Leu Asn Val Gly Phe Cys Glu Gln Glu Phe Glu
 275 280 285

Gln Thr
 290

<210> 593

<211> 665

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (8)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 593

Asp Ala Asp Gly Arg Met Asp Xaa Leu Val Ser Glu Cys Ser Ala Arg
 1 5 10 15

Leu Leu Gln Gln Glu Glu Glu Ile Lys Ser Leu Thr Ala Glu Ile Asp
 20 25 30

Arg Leu Lys Asn Cys Gly Cys Leu Gly Ala Ser Pro Asn Leu Glu Gln
 35 40 45

Leu Gln Glu Glu Asn Leu Lys Leu Lys Tyr Arg Leu Asn Ile Leu Arg
 50 55 60

Lys Ser Leu Gln Ala Glu Arg Asn Lys Pro Thr Lys Asn Met Ile Asn
 65 70 75 80

Ile Ile Ser Arg Leu Gln Glu Val Phe Gly His Ala Ile Lys Ala Ala

550

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 85 | | 90 | | 95 | | | | | | | | | | |
| Tyr | Pro | Asp | Leu | Glu | Asn | Pro | Pro | Leu | Leu | Val | Thr | Pro | Ser | Gln | Gln |
| | 100 | | | | | | | 105 | | | | | 110 | | |
| Ala | Lys | Phe | Gly | Asp | Tyr | Gln | Cys | Asn | Ser | Ala | Met | Gly | Ile | Ser | Gln |
| | 115 | | | | | | 120 | | | | | 125 | | | |
| Met | Leu | Lys | Thr | Lys | Glu | Gln | Lys | Val | Asn | Pro | Arg | Glu | Ile | Ala | Glu |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Asn | Ile | Thr | Lys | His | Leu | Pro | Asp | Asn | Glu | Cys | Ile | Glu | Lys | Val | Glu |
| 145 | | | | | 150 | | | | 155 | | | | | | 160 |
| Ile | Ala | Gly | Pro | Gly | Phe | Ile | Asn | Val | His | Leu | Arg | Lys | Asp | Phe | Val |
| | | | | 165 | | | | 170 | | | | | | 175 | |
| Ser | Glu | Gln | Leu | Thr | Ser | Leu | Leu | Val | Asn | Gly | Val | Gln | Leu | Pro | Ala |
| | | 180 | | | | | | 185 | | | | | 190 | | |
| Leu | Gly | Glu | Asn | Lys | Lys | Val | Ile | Val | Asp | Phe | Ser | Ser | Pro | Asn | Ile |
| | 195 | | | | | 200 | | | | | | 205 | | | |
| Ala | Lys | Glu | Met | His | Val | Gly | His | Leu | Arg | Ser | Thr | Ile | Ile | Gly | Glu |
| | 210 | | | | | 215 | | | | | 220 | | | | |
| Ser | Ile | Ser | Arg | Leu | Phe | Glu | Phe | Ala | Gly | Tyr | Asp | Val | Leu | Arg | Leu |
| 225 | | | | 230 | | | | | 235 | | | | | 240 | |
| Asn | His | Val | Gly | Asp | Trp | Gly | Thr | Gln | Phe | Gly | Met | Leu | Ile | Ala | His |
| | | | 245 | | | | | 250 | | | | | | 255 | |
| Leu | Gln | Asp | Lys | Phe | Pro | Asp | Tyr | Leu | Thr | Val | Ser | Pro | Pro | Ile | Gly |
| | | 260 | | | | | 265 | | | | | 270 | | | |
| Asp | Leu | Gln | Val | Phe | Tyr | Lys | Glu | Ser | Lys | Lys | Arg | Phe | Asp | Thr | Glu |
| | 275 | | | | | | 280 | | | | | 285 | | | |
| Glu | Glu | Phe | Lys | Lys | Arg | Ala | Tyr | Gln | Cys | Val | Val | Leu | Leu | Gln | Gly |
| | 290 | | | | | 295 | | | | | 300 | | | | |
| Lys | Asn | Pro | Asp | Ile | Thr | Lys | Ala | Trp | Lys | Leu | Ile | Cys | Asp | Val | Ser |
| 305 | | | | 310 | | | | | 315 | | | | | 320 | |
| Arg | Gln | Glu | Leu | Asn | Lys | Ile | Tyr | Asp | Ala | Leu | Asp | Val | Ser | Leu | Ile |
| | | | 325 | | | | | 330 | | | | | 335 | | |
| Glu | Arg | Gly | Glu | Ser | Phe | Tyr | Gln | Asp | Arg | Met | Asn | Asp | Ile | Val | Lys |
| | | 340 | | | | | 345 | | | | | 350 | | | |
| Glu | Phe | Glu | Asp | Arg | Gly | Phe | Val | Gln | Val | Asp | Asp | Gly | Arg | Lys | Ile |

551

| | | |
|---|-----|-------------|
| 355 | 360 | 365 |
| Val Phe Val Pro Gly Cys Ser Ile Pro Leu Thr Ile Val Lys Ser Asp | | |
| 370 | 375 | 380 |
| Gly Gly Tyr Thr Tyr Asp Thr Ser Asp Leu Ala Ala Ile Lys Gln Arg | | |
| 385 | 390 | 395 400 |
| Leu Phe Glu Glu Lys Ala Asp Met Ile Ile Tyr Val Val Asp Asn Gly | | |
| | 405 | 410 415 |
| Gln Ser Val His Phe Gln Thr Ile Phe Ala Ala Ala Gln Met Ile Gly | | |
| | 420 | 425 430 |
| Trp Tyr Asp Pro Lys Val Thr Arg Val Phe His Ala Gly Phe Gly Val | | |
| | 435 | 440 445 |
| Val Leu Gly Glu Asp Lys Lys Lys Phe Lys Thr Arg Ser Gly Glu Thr | | |
| | 450 | 455 460 |
| Val Arg Leu Met Asp Leu Leu Gly Glu Gly Leu Lys Arg Ser Met Asp | | |
| | 465 | 470 475 480 |
| Lys Leu Lys Glu Lys Glu Arg Asp Lys Val Leu Thr Ala Glu Glu Leu | | |
| | 485 | 490 495 |
| Asn Ala Ala Gln Thr Ser Val Ala Tyr Gly Cys Ile Lys Tyr Ala Asp | | |
| | 500 | 505 510 |
| Leu Ser His Asn Arg Leu Asn Asp Tyr Ile Phe Ser Phe Asp Lys Met | | |
| | 515 | 520 525 |
| Leu Asp Asp Arg Gly Asn Thr Ala Ala Tyr Leu Leu Tyr Ala Phe Thr | | |
| | 530 | 535 540 |
| Arg Ile Arg Ser Ile Ala Arg Leu Ala Asn Ile Asp Glu Glu Met Leu | | |
| | 545 | 550 555 560 |
| Gln Lys Ala Ala Arg Glu Thr Lys Ile Leu Leu Asp His Glu Lys Glu | | |
| | 565 | 570 575 |
| Trp Lys Leu Gly Arg Cys Ile Leu Arg Phe Pro Glu Ile Leu Gln Lys | | |
| | 580 | 585 590 |
| Ile Leu Asp Asp Leu Phe Leu His Thr Leu Cys Asp Tyr Ile Tyr Glu | | |
| | 595 | 600 605 |
| Leu Ala Thr Ala Phe Thr Glu Phe Tyr Asp Ser Cys Tyr Cys Val Glu | | |
| | 610 | 615 620 |
| Lys Asp Arg Gln Thr Gly Lys Ile Leu Lys Val Asn Met Trp Arg Met | | |

552

625 630 635 640
 Leu Leu Cys Glu Ala Val Ala Ala Val Met Ala Lys Gly Phe Asp Ile
 645 650 655
 Leu Gly Ile Lys Pro Val Gln Arg Met
 660 665

<210> 594
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 594
 Thr Val Thr Glu Thr Thr Val Thr Thr Glu Pro Glu Asn Arg
 1 5 10 15
 Ser Leu Thr Ile Lys Leu Arg Lys Arg Lys Pro Glu Lys Lys Val Glu
 20 25 30
 Trp Thr Ser Asp Thr Val Asp Asn Glu His Met Gly Arg Arg Ser Ser
 35 40 45
 Lys Cys Cys Cys Ile Tyr Glu Lys Pro Arg Ala Phe Gly Glu Ser Ser
 50 55 60
 Thr Glu Ser Asp Glu Glu Glu Glu Glu Gly Cys Gly His Thr His Cys
 65 70 75 80
 Val Arg Gly His Arg Lys Gly Arg Arg Arg Ala Thr Leu Gly Pro Thr
 85 90 95
 Pro Thr Thr Pro Pro Gln Pro Pro Asp Pro Ser Gln Pro Pro Pro Gly
 100 105 110
 Pro Met Gln His
 115

<210> 595
 <211> 294
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (269)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (278)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 595

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Gln | Leu | Arg | Val | Ser | Glu | Arg | Glu | Gly | Pro | Gly | Asp | Pro | Gln | Arg |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Phe | Ser | Asp | His | Thr | Leu | Arg | Thr | Pro | Arg | Leu | Glu | Asp | Arg | Pro | Gly |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Asp | Ala | Met | Trp | Gly | Glu | Gly | Leu | Arg | Ala | Trp | Cys | Arg | Phe | Val | Glu |
| | 35 | | | | | | 40 | | | | | 45 | | | |
| Asn | Arg | Trp | Cys | Leu | Lys | Arg | Val | Ser | Ala | Pro | Leu | His | Leu | Gly | Leu |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Leu | Gly | Cys | Pro | Asp | Ala | Glu | Ala | His | Phe | Pro | Ala | Met | Leu | Thr | Leu |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Pro | Leu | Ser | Pro | Pro | Ser | Arg | Lys | Met | Ala | Thr | Asn | Phe | Leu | Ala | His |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Glu | Lys | Ile | Trp | Phe | Asp | Lys | Phe | Lys | Tyr | Asp | Asp | Ala | Glu | Arg | Arg |
| | | 100 | | | | | | 105 | | | | | 110 | | |
| Phe | Tyr | Glu | Gln | Met | Asn | Gly | Pro | Val | Ala | Gly | Ala | Ser | Arg | Gln | Glu |
| | 115 | | | | | 120 | | | | | | 125 | | | |
| Asn | Gly | Ala | Ser | Val | Ile | Leu | Arg | Asp | Ile | Ala | Arg | Ala | Arg | Glu | Asn |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Ile | Gln | Lys | Ser | Leu | Ala | Gly | Ser | Ser | Gly | Pro | Gly | Ala | Ser | Ser | Gly |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Thr | Ser | Gly | Asp | His | Gly | Glu | Leu | Val | Val | Arg | Ile | Ala | Ser | Leu | Glu |
| | | | 165 | | | | | | 170 | | | | | 175 | |
| Val | Glu | Asn | Gln | Ser | Leu | Arg | Gly | Val | Val | Gln | Glu | Leu | Gln | Gln | Ala |
| | | 180 | | | | | | 185 | | | | | 190 | | |
| Ile | Ser | Lys | Leu | Glu | Ala | Arg | Leu | Asn | Val | Leu | Glu | Lys | Ser | Ser | Pro |
| | 195 | | | | | | 200 | | | | | 205 | | | |
| Gly | His | Arg | Ala | Thr | Ala | Pro | Gln | Thr | Gln | His | Val | Ser | Pro | Met | Arg |
| | 210 | | | | | 215 | | | | | 220 | | | | |
| Gln | Val | Glu | Pro | Pro | Ala | Lys | Lys | Pro | Ala | Thr | Pro | Ala | Glu | Asp | Asp |
| 225 | | | | | 230 | | | | | 235 | | | | | 240 |

Glu Asp Asp Asp Ile Asp Leu Phe Gly Ser Asp Asn Glu Glu Glu Asp
 245 250 255

Lys Glu Ala Ala Gln Leu Arg Glu Glu Arg Leu Arg Xaa Tyr Ala Glu
 260 265 270

Lys Lys Ala Lys Lys Xaa Ala Leu Val Ala Lys Ser Ser Ile Leu Leu
 275 280 285

Asp Phe Lys Pro Trp Gly
 290

<210> 596

<211> 134

<212> PRT

<213> Homo sapiens

<400> 596

Val Ser Arg Leu Gly Leu Leu Thr Pro Leu Gly Cys Ser Phe Gly Thr
 1 5 10 15

Asp Glu Trp Leu Cys Pro Val Thr Ala Leu Ser Leu Pro Gly Gly Tyr
 20 25 30

Val His Ser Arg Pro Leu Pro Arg Leu Arg Pro Met Arg Tyr Gly Asp
 35 40 45

Thr Leu Ala Pro Arg Ser Trp Arg His Arg Pro Leu Pro Trp His Ser
 50 55 60

Ser Phe Ala Gly Asp Pro Pro Leu Pro Lys Ala Leu Ser Pro Cys Ser
 65 70 75 80

His Ser Arg Arg Thr Ala Ala Arg Ala Ser Gly Ser Leu Ala Thr Gly
 85 90 95

Phe Glu Arg Leu His Ser Trp Gly Leu Glu Gly Gly Val Pro Lys Ala
 100 105 110

Leu Ser Lys Ser Gln Ser Ser Ser His Gln Ser Leu Tyr Lys Val Leu
 115 120 125

Gly Pro Glu Ala Leu Pro
 130

<210> 597

555

<211> 91

<212> PRT

<213> Homo sapiens

<400> 597

Glu Gly Pro Glu Gly Ala Asn Leu Phe Ile Tyr His Leu Pro Gln Glu
 1 5 10 15

Phe Gly Asp Gln Asp Ile Leu Gln Met Phe Met Pro Phe Gly Asn Val
 20 25 30

Ile Ser Ala Lys Val Phe Ile Asp Lys Gln Thr Asn Leu Ser Lys Cys
 35 40 45

Phe Gly Phe Val Ser Tyr Asp Asn Pro Val Ser Ala Gln Ala Ala Ile
 50 55 60

Gln Ala Met Asn Gly Phe Gln Ile Gly Met Lys Arg Leu Lys Val Gln
 65 70 75 80

Leu Lys Arg Ser Lys Asn Asp Ser Lys Pro Tyr
 85 90

<210> 598

<211> 68

<212> PRT

<213> Homo sapiens

<400> 598

Arg Pro Thr Arg Pro Glu Lys Val Gly Ser Gly Gly Ser Ser Val Gly
 1 5 10 15

Ser Gly Asp Ala Ser Ser Ser Arg His His His Arg Arg Arg Arg Phe
 20 25 30

His Leu Pro Gln Gln Pro Leu Leu Gln Arg Glu Val Trp Cys Val Gly
 35 40 45

Thr Thr Gly Asn Ala Asn Gln Ala Gln Ser Ser Thr Glu Gln Thr Leu
 50 55 60

Leu Lys Pro Lys
 65

<210> 599

<211> 119

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (58)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (68)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (88)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (98)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (99)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 599

Phe Gly Arg Asp Gln Val Tyr Leu Ser Tyr Asn Asn Val Ser Ser Leu
1 5 10 15

Lys Met Leu Val Ala Lys Asp Asn Trp Val Leu Ser Ser Glu Ile Ser
20 25 30

Gln Val Arg Leu Tyr Thr Leu Glu Asp Asp Lys Phe Leu Ser Phe His
35 40 45

Met Glu Met Val Val His Val Asp Ala Xaa Gln Ala Phe Leu Leu Leu
50 55 60

Ser Asp Leu Xaa Gln Arg Pro Glu Trp Asp Lys His Tyr Arg Ser Val
65 70 75 80

Glu Leu Val Gln Gln Val Asp Xaa Gly Arg Arg His Leu Pro Arg His
85 90 95

Gln Xaa Xaa Pro Arg Arg Ser His Lys Ala Pro Gly Leu Arg Asp Pro
100 105 110

Gly Leu Glu Ala Glu Ala Leu
115

<210> 600
 <211> 177
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (1)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (8)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (69)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (135)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 600
 Xaa Glu Arg Leu Arg Ala Gln Xaa Glu Lys Ser Arg Asp Ser Gln Pro
 1 5 10 15
 Arg Leu Pro Leu Arg Phe Pro Ser Trp Arg Gly Pro Trp Cys Gly Ile
 20 25 30
 Glu Ile Ala Gly Tyr Gly Ala Glu Val Phe Arg Gln Tyr Trp Asp Ile
 35 40 45
 Pro Asp Gly Thr Asp Cys His Arg Lys Ala Tyr Ser Thr Thr Ser Ile
 50 55 60
 Ala Ser Val Ala Xaa Leu Thr Ala Ala Ala Tyr Arg Val Thr Leu Asn
 65 70 75 80
 Pro Pro Gly Thr Phe Leu Glu Gly Val Ala Lys Val Gly Gln Tyr Thr
 85 90 95
 Phe Thr Ala Ala Ala Val Gly Ala Val Phe Gly Leu Thr Thr Cys Ile
 100 105 110
 Ser Ala His Val Arg Glu Lys Pro Asp Asp Pro Leu Asn Tyr Phe Leu

115 120 125
 Gly Gly Cys Ala Gly Gly Xaa Thr Leu Gly Ala Arg Thr His Asn Tyr
 130 135 140
 Gly Ile Gly Ala Ala Ala Cys Val Tyr Phe Gly Ile Ala Ala Ser Leu
 145 150 155 160
 Val Lys Met Gly Arg Leu Glu Gly Trp Glu Val Phe Ala Lys Pro Lys
 165 170 175
 Val

<210> 601
 <211> 218
 <212> PRT
 <213> Homo sapiens

<400> 601
 Arg Gly Gly Gly Gly Gly Ala Ser Ser Cys Cys Cys Cys Ala Pro Ser
 1 5 10 15
 Pro Arg Gly Arg Pro Val Pro Ala Arg Thr Pro Arg Arg Cys Pro Arg
 20 25 30
 Pro Ser Pro Gly Pro Ala Met Gly Leu Thr Val Ser Ala Leu Phe Ser
 35 40 45
 Arg Ile Phe Gly Lys Lys Gln Met Arg Ile Leu Met Val Gly Leu Asp
 50 55 60
 Ala Ala Gly Lys Thr Thr Ile Leu Tyr Lys Leu Lys Leu Gly Glu Ile
 65 70 75 80
 Val Thr Thr Ile Pro Thr Ile Gly Phe Asn Val Glu Thr Val Glu Tyr
 85 90 95
 Lys Asn Ile Cys Phe Thr Val Trp Asp Val Gly Gly Gln Asp Lys Ile
 100 105 110
 Arg Pro Leu Trp Arg His Tyr Phe Gln Asn Thr Gln Gly Leu Ile Phe
 115 120 125
 Val Val Asp Ser Asn Asp Arg Glu Arg Val Gln Glu Ser Ala Asp Glu
 130 135 140
 Leu Gln Lys Met Leu Gln Glu Asp Glu Leu Arg Asp Ala Val Leu Leu
 145 150 155 160

Asp Trp Leu Ser His Glu Leu Ser Lys Arg
210 215

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<210> 602
<211> 829
<212> PRT
<213> Homo sapiens
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<220>  
<221> SITE  
<222> (32)  
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (454)
<223> Xaa equals any of the naturally occurring L-amino acids
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<400> 602
Pro Gly Gln Ala Gly Ala Glu Gly His Val Arg Cys Cys Pro Gly Glu
1 5 10 15

Glu Gln Lys Ala Gly Gly Glu Arg Arg Cys Pro Gly Pro Gln Arg Xaa
20 25 30

Gly Ala Ala Leu Gly Pro Gly Pro Gly Glu Ala Arg Leu Asp Tyr Ser
35 40 45

Glu Phe Phe Thr Glu Asp Val Gly Gln Leu Pro Gly Leu Thr Ile Trp
50 55 60

Gln Ile Glu Asn Phe Val Pro Val Leu Val Glu Glu Ala Phe His Gly
65 70 75 80

Lys Phe Tyr Glu Ala Asp Cys Tyr Ile Val Leu Lys Thr Phe Leu Asp
85 90 95

Asp Ser Gly Ser Leu Asn Trp Glu Ile Tyr Tyr Trp Ile Gly Gly Glu
100 105 110

560

Ala Thr Leu Asp Lys Lys Ala Cys Ser Ala Ile His Ala Val Asn Leu
 115 120 125

Arg Asn Tyr Leu Gly Ala Glu Cys Arg Thr Val Arg Glu Glu Met Gly
 130 135 140

Asp Glu Ser Glu Glu Phe Leu Gln Val Phe Asp Asn Asp Ile Ser Tyr
 145 150 155 160

Ile Glu Gly Gly Thr Ala Ser Gly Phe Tyr Thr Val Glu Asp Thr His
 165 170 175

Tyr Val Thr Arg Met Tyr Arg Val Tyr Gly Lys Lys Asn Ile Lys Leu
 180 185 190

Glu Pro Val Pro Leu Lys Gly Thr Ser Leu Asp Pro Arg Phe Val Phe
 195 200 205

Leu Leu Asp Arg Gly Leu Asp Ile Tyr Val Trp Arg Gly Ala Gln Ala
 210 215 220

Thr Leu Ser Ser Thr Thr Lys Ala Arg Leu Phe Ala Glu Lys Ile Asn
 225 230 235 240

Lys Asn Glu Arg Lys Gly Lys Ala Glu Ile Thr Leu Leu Val Gln Gly
 245 250 255

Gln Glu Leu Pro Glu Phe Trp Glu Ala Leu Gly Gly Glu Pro Ser Glu
 260 265 270

Ile Lys Lys His Val Pro Glu Asp Phe Trp Pro Pro Gln Pro Lys Leu
 275 280 285

Tyr Lys Val Gly Leu Gly Leu Gly Tyr Leu Glu Leu Pro Gln Ile Asn
 290 295 300

Tyr Lys Leu Ser Val Glu His Lys Gln Arg Pro Lys Val Glu Leu Met
 305 310 315 320

Pro Arg Met Arg Leu Leu Gln Ser Leu Leu Asp Thr Arg Cys Val Asn
 325 330 335

Ile Leu Asp Cys Trp Ser Asp Val Phe Ile Trp Leu Gly Arg Lys Ser
 340 345 350

Pro Arg Leu Val Arg Ala Ala Ala Leu Lys Leu Gly Gln Glu Leu Cys
 355 360 365

Gly Met Leu His Arg Pro Arg His Ala Thr Val Ser Arg Ser Leu Glu
 370 375 380

Gly Thr Glu Ala Gln Val Phe Lys Ala Lys Phe Lys Asn Trp Asp Asp
 385 390 395 400
 Val Leu Thr Val Asp Tyr Thr Arg Asn Ala Glu Ala Val Leu Gln Ser
 405 410 415
 Pro Gly Leu Ser Gly Lys Val Lys Arg Asp Ala Glu Lys Lys Asp Gln
 420 425 430
 Met Lys Ala Asp Leu Thr Ala Leu Phe Leu Pro Arg Gln Pro Pro Met
 435 440 445
 Ser Leu Ala Glu Ala Xaa Gln Leu Met Glu Glu Trp Asn Glu Asp Leu
 450 455 460
 Asp Gly Met Glu Gly Phe Val Leu Glu Gly Lys Lys Phe Ala Arg Leu
 465 470 475 480
 Pro Glu Glu Glu Phe Gly His Phe Tyr Thr Gln Asp Cys Tyr Val Phe
 485 490 495
 Leu Cys Arg Tyr Trp Val Pro Val Glu Tyr Glu Glu Glu Glu Lys Lys
 500 505 510
 Glu Asp Lys Glu Glu Lys Ala Glu Gly Lys Glu Gly Glu Glu Ala Thr
 515 520 525
 Ala Glu Ala Glu Glu Lys Gln Pro Glu Glu Asp Phe Gln Cys Ile Val
 530 535 540
 Tyr Phe Trp Gln Gly Arg Glu Ala Ser Asn Met Gly Trp Leu Thr Phe
 545 550 555 560
 Thr Phe Ser Leu Gln Lys Lys Phe Glu Ser Leu Phe Pro Gly Lys Leu
 565 570 575
 Glu Val Val Arg Met Thr Gln Gln Gln Glu Asn Pro Lys Phe Leu Ser
 580 585 590
 His Phe Lys Arg Lys Phe Ile Ile His Arg Gly Lys Arg Lys Ala Val
 595 600 605
 Gln Gly Ala Gln Gln Pro Ser Leu Tyr Gln Ile Arg Thr Asn Gly Ser
 610 615 620
 Ala Leu Cys Thr Arg Cys Ile Gln Ile Asn Thr Asp Ser Ser Leu Leu
 625 630 635 640
 Asn Ser Glu Phe Cys Phe Ile Leu Lys Val Pro Phe Glu Ser Glu Asp
 645 650 655

562

Asn Gln Gly Ile Val Tyr Ala Trp Val Gly Arg Ala Ser Asp Pro Asp
 660 665 670
 Glu Ala Lys Leu Ala Glu Asp Ile Leu Asn Thr Met Phe Asp Thr Ser
 675 680 685
 Tyr Ser Lys Gln Val Ile Asn Glu Gly Glu Glu Pro Glu Asn Phe Phe
 690 695 700
 Trp Val Gly Ile Gly Ala Gln Lys Pro Tyr Asp Asp Asp Ala Glu Tyr
 705 710 715 720
 Met Lys His Thr Arg Leu Phe Arg Cys Ser Asn Glu Lys Gly Tyr Phe
 725 730 735
 Ala Val Thr Glu Lys Cys Ser Asp Phe Cys Gln Asp Asp Leu Ala Asp
 740 745 750
 Asp Asp Ile Met Leu Leu Asp Asn Gly Gln Glu Val Tyr Met Trp Val
 755 760 765
 Gly Thr Gln Thr Ser Gln Val Glu Ile Lys Leu Ser Leu Lys Ala Cys
 770 775 780
 Gln Val Tyr Ile Gln His Met Arg Ser Lys Glu His Glu Arg Pro Arg
 785 790 795 800
 Arg Leu Arg Leu Val Arg Lys Gly Asn Glu Gln His Ala Phe Thr Arg
 805 810 815
 Cys Phe His Ala Trp Ser Ala Phe Cys Lys Ala Leu Ala
 820 825

<210> 603

<211> 221

<212> PRT

<213> Homo sapiens

<400> 603

Thr Glu Pro Pro Leu Ser Cys Cys Leu Pro Ala Thr Tyr Pro Ala Asp
 1 5 10 15
 Met Gly Thr Ala Gly Ala Met Gln Leu Cys Trp Val Ile Leu Gly Phe
 20 25 30
 Leu Leu Phe Arg Gly His Asn Ser Gln Pro Thr Met Thr Gln Thr Ser
 35 40 45

Ser Ser Gln Gly Gly Leu Gly Gly Leu Ser Leu Thr Thr Glu Pro Val
 50 55 60
 Ser Ser Asn Pro Gly Tyr Ile Pro Ser Ser Glu Ala Asn Arg Pro Ser
 65 70 75 80
 His Leu Ser Ser Thr Gly Thr Pro Gly Ala Gly Val Pro Ser Ser Gly
 85 90 95
 Arg Asp Gly Gly Thr Ser Arg Asp Thr Phe Gln Thr Val Pro Pro Asn
 100 105 110
 Ser Thr Thr Met Ser Leu Ser Met Arg Glu Asp Ala Thr Ile Leu Pro
 115 120 125
 Ser Pro Thr Ser Glu Thr Val Leu Thr Val Ala Ala Phe Gly Val Ile
 130 135 140
 Ser Phe Ile Val Ile Leu Val Val Val Val Ile Ile Leu Val Gly Val
 145 150 155 160
 Val Ser Leu Arg Phe Lys Cys Arg Lys Ser Lys Glu Ser Glu Asp Pro
 165 170 175
 Gln Lys Pro Gly Ser Ser Gly Leu Ser Glu Ser Cys Ser Thr Ala Asn
 180 185 190
 Gly Glu Lys Asp Ser Ile Thr Leu Ile Ser Met Lys Asn Ile Asn Met
 195 200 205
 Asn Asn Gly Lys Gln Ser Leu Ser Ala Glu Lys Val Leu
 210 215 220

<210> 604

<211> 97

<212> PRT

<213> Homo sapiens

<400> 604

Ser Cys Gly Leu Ser Leu Ile Lys Met Thr Thr Ser Gln Lys His Arg
 1 5 10 15
 Asp Phe Val Ala Glu Pro Met Gly Glu Lys Pro Val Gly Ser Leu Ala
 20 25 30
 Gly Ile Gly Glu Val Leu Gly Lys Lys Leu Glu Glu Arg Gly Phe Asp
 35 40 45
 Lys Ala Tyr Val Val Leu Gly Gln Phe Leu Val Leu Lys Lys Asp Glu

564

50 55 60
 Asp Leu Phe Arg Glu Trp Leu Lys Asp Thr Cys Gly Ala Asn Ala Lys
 65 70 75 80
 Gln Ser Arg Asp Cys Phe Gly Cys Leu Arg Glu Trp Cys Asp Ala Phe
 85 90 95
 Leu

 <210> 605
 <211> 266
 <212> PRT
 <213> Homo sapiens

 <220>
 <221> SITE
 <222> (84)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <400> 605
 Gly Pro Arg Arg Leu Gly Ala Leu His Ala Ala Ala Thr Gly Ala Arg
 1 5 10 15
 Cys Leu Val Glu Leu Leu Val Ala His Gly Ala Asp Leu Asn Ala Lys
 20 25 30
 Ser Leu Met Asp Glu Thr Pro Leu Asp Val Cys Gly Asp Glu Glu Val
 35 40 45
 Arg Ala Lys Leu Leu Glu Leu Lys His Lys His Asp Ala Leu Leu Arg
 50 55 60
 Ala Gln Ser Arg Gln Arg Ser Leu Leu Arg Arg Arg Thr Ser Ser Ala
 65 70 75 80
 Gly Ser Arg Xaa Lys Val Val Arg Arg Val Ser Leu Thr Gln Arg Thr
 85 90 95
 Asp Leu Tyr Arg Lys Gln His Ala Gln Glu Ala Ile Val Trp Gln Gln
 100 105 110
 Pro Pro Pro Thr Ser Pro Glu Pro Pro Glu Asp Asn Asp Asp Arg Gln
 115 120 125
 Thr Gly Ala Glu Leu Arg Pro Pro Pro Pro Glu Glu Asp Asn Pro Glu
 130 135 140

565

Val Val Arg Pro His Asn Gly Arg Val Gly Gly Ser Pro Val Arg His
 145 150 155 160
 Leu Tyr Ser Lys Arg Leu Asp Arg Ser Val Ser Tyr Gln Leu Ser Pro
 165 170 175
 Leu Asp Ser Thr Thr Pro His Thr Leu Val His Asp Lys Ala His His
 180 185 190
 Thr Leu Ala Asp Leu Lys Arg Gln Arg Ala Ala Ala Lys Leu Gln Arg
 195 200 205
 Pro Pro Pro Glu Gly Pro Glu Ser Pro Glu Thr Ala Glu Pro Gly Leu
 210 215 220
 Pro Gly Asp Thr Val Thr Pro Gln Pro Asp Cys Gly Phe Arg Ala Gly
 225 230 235 240
 Gly Asp Pro Pro Leu Leu Lys Leu Thr Ala Pro Ala Val Glu Ala Pro
 245 250 255
 Val Glu Arg Arg Pro Cys Cys Leu Leu Met
 260 265

<210> 606

<211> 331

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (91)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (285)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 606

His Asp Ser Cys Phe Val Glu Met Gln Ala Gln Lys Val Met His Val
 1 5 10 15

Ser Ser Ala Glu Leu Asn Tyr Ser Leu Pro Tyr Asp Ser Lys His Gln
 20 25 30

Ile Arg Asn Ala Ser Asn Val Lys His His Asp Ser Ser Ala Leu Gly
 35 40 45

566

Val Tyr Ser Tyr Ile Pro Leu Val Glu Asn Pro Tyr Phe Ser Ser Trp
 50 55 60

Pro Pro Ser Gly Thr Ser Ser Lys Met Ser Leu Asp Leu Pro Glu Lys
 65 70 75 80

Gln Asp Gly Thr Val Phe Pro Ser Ser Leu Xaa Pro Thr Ser Ser Thr
 85 90 95

Ser Leu Phe Ser Tyr Tyr Asn Ser His Asp Ser Leu Ser Leu Asn Ser
 100 105 110

Pro Thr Asn Ile Ser Ser Leu Leu Asn Gln Glu Ser Ala Val Leu Ala
 115 120 125

Thr Ala Pro Arg Ile Asp Asp Glu Ile Pro Pro Pro Leu Pro Val Arg
 130 135 140

Thr Pro Glu Ser Phe Ile Val Val Glu Glu Ala Gly Glu Phe Ser Pro
 145 150 155 160

Asn Val Pro Lys Ser Leu Ser Ser Ala Val Lys Val Lys Ile Gly Thr
 165 170 175

Ser Leu Glu Trp Gly Gly Thr Ser Glu Pro Lys Lys Phe Asp Asp Ser
 180 185 190

Val Ile Leu Arg Pro Ser Lys Ser Val Lys Leu Arg Ser Pro Lys Ser
 195 200 205

Glu Leu His Gln Asp Arg Ser Ser Pro Pro Pro Pro Leu Pro Glu Arg
 210 215 220

Thr Leu Glu Ser Phe Phe Leu Ala Asp Glu Asp Cys Met Gln Ala Gln
 225 230 235 240

Ser Ile Glu Thr Tyr Ser Thr Ser Tyr Pro Asp Thr Met Glu Asn Ser
 245 250 255

Thr Ser Ser Lys Gln Thr Leu Lys Thr Pro Gly Lys Ser Phe Thr Arg
 260 265 270

Ser Lys Ser Leu Lys Ile Leu Arg Asn Met Lys Lys Xaa Ile Cys Asn
 275 280 285

Ser Cys Pro Pro Asn Lys Pro Ala Glu Ser Val Gln Ser Asn Asn Ser
 290 295 300

Ser Ser Phe Leu Asn Phe Gly Phe Ala Asn Arg Phe Ser Lys Pro Lys
 305 310 315 320

567

Gly Pro Arg Asn Pro Pro Pro Thr Trp Asn Ile
 325 330

<210> 607

<211> 192

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (78)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 607

Ala Ala Pro Ser Glu Pro Lys Ala Arg Gly Gly His Gly Gly Ala Leu
 1 5 10 15

Ala Arg Leu Glu Thr Met Pro Lys Leu Gln Gly Phe Glu Phe Trp Ser
 20 25 30

Arg Thr Leu Arg Gly Ala Arg His Val Val Ala Pro Met Val Asp Gln
 35 40 45

Ser Glu Leu Ala Trp Arg Leu Leu Ser Arg Arg His Gly Ala Gln Leu
 50 55 60

Cys Tyr Thr Pro Met Leu His Ala Gln Val Phe Val Arg Xaa Ala Asn
 65 70 75 80

Tyr Arg Lys Glu Asn Leu Tyr Cys Glu Val Cys Pro Glu Asp Arg Pro
 85 90 95

Leu Ile Val Gln Phe Cys Ala Asn Asp Pro Glu Val Phe Val Gln Ala
 100 105 110

Ala Leu Leu Ala Gln Asp Tyr Cys Asp Ala Ile Asp Leu Asn Leu Gly
 115 120 125

Cys Pro Gln Met Ile Ala Lys Arg Gly His Tyr Gly Ala Phe Leu Gln
 130 135 140

Asp Glu Trp Asp Leu Leu Gln Arg Met Ile Leu Leu Ala His Glu Lys
 145 150 155 160

Leu Ser Val Pro Val Thr Cys Lys Ile Arg Val Phe Pro Glu Ile Asp
 165 170 175

Lys Thr Val Ser Thr Pro Arg Cys Trp Arg Arg Pro Ala Ala Ser Cys
 180 185 190

<210> 608

<211> 415

<212> PRT

<213> Homo sapiens

<400> 608

His Ile Lys Cys Pro His Ser Lys Tyr Gly Cys Thr Phe Ile Gly Asn
 1 5 10 15
 Gln Asp Thr Tyr Glu Thr His Leu Glu Thr Cys Arg Phe Glu Gly Leu
 20 25 30
 Lys Glu Phe Leu Gln Gln Thr Asp Asp Arg Phe His Glu Met His Val
 35 40 45
 Ala Leu Ala Gln Lys Asp Gln Glu Ile Ala Phe Leu Arg Ser Met Leu
 50 55 60
 Gly Lys Leu Ser Glu Lys Ile Asp Gln Leu Glu Lys Ser Leu Glu Leu
 65 70 75 80
 Lys Phe Asp Val Leu Asp Glu Asn Gln Ser Lys Leu Ser Glu Asp Leu
 85 90 95
 Met Glu Phe Arg Arg Asp Ala Ser Met Leu Asn Asp Glu Leu Ser His
 100 105 110
 Ile Asn Ala Arg Leu Asn Met Gly Ile Leu Gly Ser Tyr Asp Pro Gln
 115 120 125
 Gln Ile Phe Lys Cys Lys Gly Thr Phe Val Gly His Gln Gly Pro Val
 130 135 140
 Trp Cys Leu Cys Val Tyr Ser Met Gly Asp Leu Leu Phe Ser Gly Ser
 145 150 155 160
 Ser Asp Lys Thr Ile Lys Val Trp Asp Thr Cys Thr Thr Tyr Lys Cys
 165 170 175
 Gln Lys Thr Leu Glu Gly His Asp Gly Ile Val Leu Ala Leu Cys Ile
 180 185 190
 Gln Gly Cys Lys Leu Tyr Ser Gly Ser Ala Asp Cys Thr Ile Ile Val
 195 200 205

Trp Asp Ile Gln Asn Leu Gln Lys Val Asn Thr Ile Arg Ala His Asp
 210 215 220
 Asn Pro Val Cys Thr Leu Val Ser Ser His Asn Val Leu Phe Ser Gly
 225 230 235 240
 Ser Leu Lys Ala Ile Lys Val Trp Asp Ile Val Gly Thr Glu Leu Lys
 245 250 255
 Leu Lys Lys Glu Leu Thr Gly Leu Asn His Trp Val Arg Ala Leu Val
 260 265 270
 Ala Ala Gln Ser Tyr Leu Tyr Ser Gly Ser Tyr Gln Thr Ile Lys Ile
 275 280 285
 Trp Asp Ile Arg Thr Leu Asp Cys Ile His Val Leu Gln Thr Ser Gly
 290 295 300
 Gly Ser Val Tyr Ser Ile Ala Val Thr Asn His His Ile Val Cys Gly
 305 310 315 320
 Thr Tyr Glu Asn Leu Ile His Val Trp Asp Ile Glu Ser Lys Glu Gln
 325 330 335
 Val Arg Thr Leu Thr Gly His Val Gly Thr Val Tyr Ala Leu Ala Val
 340 345 350
 Ile Ser Thr Pro Asp Gln Thr Lys Val Phe Ser Ala Ser Tyr Asp Arg
 355 360 365
 Ser Leu Arg Val Trp Ser Met Asp Asn Met Ile Cys Thr Gln Thr Leu
 370 375 380
 Leu Arg His Gln Gly Ser Val Thr Ala Leu Ala Val Ser Arg Gly Arg
 385 390 395 400
 Leu Phe Ser Gly Ala Val Asp Ser Thr Val Lys Val Trp Thr Cys
 405 410 415

<210> 609

<211> 48

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (27)

<223> Xaa equals any of the naturally occurring L-amino acids

570

<220>

<221> SITE

<222> (34)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 609

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Ser | Glu | Leu | Asn | Gln | Cys | Phe | Tyr | Ile | Cys | Phe | Phe | Phe | Tyr | Ala |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Trp | Lys | Trp | Arg | Met | Lys | Ile | Gln | Leu | Xaa | Cys | Ser | Asn | Ser | Arg |
| | | | 20 | | | | | 25 | | | | | 30 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Xaa | Val | Ser | Thr | Glu | Lys | Gly | Thr | Cys | Phe | Phe | Thr | Pro | Glu | Leu |
| | | 35 | | | | | 40 | | | | | | 45 | | |

<210> 610

<211> 241

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (13)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (37)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 610

571

Xaa Asp Xaa Gly Arg Pro Xaa Arg Thr Ala Glu Ser Xaa Phe Gly Ile
 1 5 10 15
 Asn Leu Lys Gly Pro Lys Ile Lys Gly Gly Ala Asp Val Ser Gly Gly
 20 25 30
 Val Ser Ala Pro Xaa Ile Ser Leu Gly Glu Gly His Leu Ser Val Lys
 35 40 45
 Gly Ser Gly Gly Glu Trp Lys Gly Pro Gln Val Ser Ser Ala Leu Asn
 50 55 60
 Leu Asp Thr Ser Lys Phe Ala Gly Gly Leu His Phe Ser Gly Pro Lys
 65 70 75 80
 Val Glu Gly Gly Val Lys Gly Gly Gln Ile Gly Leu Gln Ala Pro Gly
 85 90 95
 Leu Ser Val Ser Gly Pro Gln Gly His Leu Glu Ser Gly Ser Gly Lys
 100 105 110
 Val Thr Phe Pro Lys Met Lys Ile Pro Lys Phe Thr Phe Ser Gly Arg
 115 120 125
 Glu Leu Val Gly Arg Glu Met Gly Val Asp Val His Phe Pro Lys Ala
 130 135 140
 Glu Ala Ser Ile Gln Ala Gly Ala Gly Asp Gly Glu Trp Glu Glu Ser
 145 150 155 160
 Glu Val Lys Leu Lys Lys Ser Lys Ile Lys Met Pro Lys Phe Asn Phe
 165 170 175
 Ser Lys Pro Lys Gly Lys Gly Gly Val Thr Gly Ser Pro Glu Ala Ser
 180 185 190
 Ile Ser Gly Ser Lys Gly Asp Leu Lys Ser Ser Lys Ala Ser Leu Gly
 195 200 205
 Ser Leu Glu Gly Glu Ala Glu Ala Glu Ala Ser Ser Pro Lys Gly Lys
 210 215 220
 Phe Ser Leu Phe Lys Ser Lys Lys Pro Arg His Arg Cys Lys Phe Ile
 225 230 235 240
 Gln

<210> 611

572

<211> 77

<212> PRT

<213> Homo sapiens

<400> 611

His Tyr Arg Arg Tyr Ala Cys Arg Tyr Arg Ser Gly Ile Pro Gly Ser
 1 5 10 15
 Thr His Ala Ser Gly Val Ala Asp Gly Gly Gln Val Phe Leu Phe Pro
 20 25 30
 Glu Thr Gly Ser Val Gln Thr Ala Asn Ala His Arg Trp Pro Arg Gly
 35 40 45
 Gly Gly Ser Gln Gly Val Trp Val Phe Leu Gly Phe Phe Ser Val Val
 50 55 60
 Ser Phe Thr Gln Gly Trp Trp Ser Gln Pro Val Trp Cys
 65 70 75

<210> 612

<211> 137

<212> PRT

<213> Homo sapiens

<400> 612

Leu Gln Val Pro Val Arg Asn Ser Gly Ser Pro Thr Arg Gln Ala Ala
 1 5 10 15
 Ala Met Thr Phe Cys Arg Leu Leu Asn Arg Cys Gly Glu Ala Ala Arg
 20 25 30
 Ser Leu Pro Leu Gly Ala Arg Cys Phe Gly Val Arg Val Ser Pro Thr
 35 40 45
 Gly Glu Lys Val Thr His Thr Gly Gln Val Tyr Asp Asp Lys Asp Tyr
 50 55 60
 Arg Arg Ile Arg Phe Val Gly Arg Gln Lys Glu Val Asn Glu Asn Phe
 65 70 75 80
 Ala Ile Asp Leu Ile Ala Glu Gln Pro Val Ser Glu Val Glu Thr Arg
 85 90 95
 Val Ile Ala Cys Asp Gly Gly Gly Gly Ala Leu Gly His Pro Lys Val
 100 105 110
 Tyr Ile Asn Leu Asp Lys Glu Thr Lys Thr Gly Thr Cys Gly Tyr Cys
 115 120 125

Gly Leu Gln Phe Arg Gln His His His
130 135

<210> 613
<211> 122
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (50)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (75)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (80)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (85)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (98)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (105)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (111)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (116)
<223> Xaa equals any of the naturally occurring L-amino acids

574

<400> 613

Tyr Ser Thr Asp Asn Asn Asn Asn Trp Tyr Ser Ile Phe Tyr Leu His
 1 5 10 15
 Ser Ser Phe Leu Gly Glu Asn Ala Glu Lys Leu Leu Gln Phe Lys Arg
 20 25 30
 Trp Phe Trp Ser Ile Val Glu Lys Met Ser Met Thr Glu Arg Gln Asp
 35 40 45
 Leu Xaa Tyr Phe Trp Thr Ser Ser Pro Ser Leu Pro Ala Ser Glu Glu
 50 55 60
 Gly Phe Gln Pro Met Pro Ser Ile Thr Ile Xaa Pro Pro Asp Asp Xaa
 65 70 75 80
 His Leu Pro Thr Xaa Lys Tyr Leu His Phe Leu Asp Phe Thr Phe Pro
 85 90 95
 Leu Xaa Ser Phe Lys Gln Asp Ser Xaa Asn Arg Lys Leu Val Xaa Ser
 100 105 110
 Pro Phe Arg Xaa Gln Lys Phe Trp Val Leu
 115 120

<210> 614

<211> 62

<212> PRT

<213> Homo sapiens

<400> 614

Phe Phe Ile Gly Leu Glu Thr Arg Ala Asn Ser Ile Met Phe Ser Lys
 1 5 10 15
 Glu Thr Asp Leu Ser Cys Trp Ile Arg Gly Thr Asn Pro Thr Tyr Met
 20 25 30
 Ile Phe Phe Leu Phe Leu Ser Cys Ser Tyr Gly Thr Val Leu Phe Gly
 35 40 45
 Thr Phe Ala Thr Arg Asp Asn Thr Thr Phe Leu Thr Leu Ile
 50 55 60

<210> 615

<211> 159

<212> PRT

<213> Homo sapiens

575

<400> 615

Val Gly Leu Pro Asn Met Ala Gln Ser Ile Asn Ile Thr Glu Leu Asn
 1 5 10 15

Leu Pro Gln Leu Glu Met Leu Lys Asn Gln Leu Asp Gln Glu Val Glu
 20 25 30

Phe Leu Ser Thr Ser Ile Ala Gln Leu Lys Val Val Gln Thr Lys Tyr
 35 40 45

Val Glu Ala Lys Asp Cys Leu Asn Val Leu Asn Lys Ser Asn Glu Gly
 50 55 60

Lys Glu Leu Leu Val Pro Leu Thr Ser Ser Met Tyr Val Pro Gly Lys
 65 70 75 80

Leu His Asp Val Glu His Val Leu Ile Asp Val Gly Thr Gly Tyr Tyr
 85 90 95

Val Glu Lys Thr Ala Glu Asp Ala Lys Asp Phe Phe Lys Arg Lys Ile
 100 105 110

Asp Phe Leu Thr Lys Gln Met Glu Lys Ile Gln Pro Ala Leu Gln Glu
 115 120 125

Lys His Ala Met Lys Gln Ala Val Met Glu Met Met Ser Gln Lys Ile
 130 135 140

Gln Gln Leu Thr Ala Leu Gly Ala Ala Gln Ala Thr Ala Lys Ala
 145 150 155

<210> 616

<211> 93

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (8)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 616

Lys Val Ala Cys Arg Tyr Arg Xaa Gly Ile Pro Gly Arg Pro Thr Arg
 1 5 10 15

Pro Gly Thr Gln Asp Ala Glu Gly Lys Lys Ala Lys Gly Lys Lys Val
 20 25 30

576

Ala Pro Ala Pro Ala Val Val Lys Lys Gln Glu Ala Lys Lys Val Val
 35 40 45

Asn Pro Leu Phe Glu Lys Arg Pro Lys Asn Phe Gly Ile Gly Gln Asp
 50 55 60

Ile Gln Pro Lys Arg Asp Leu Thr Arg Phe Val Lys Trp Pro Arg Tyr
 65 70 75 80

Ile Arg Leu Gln Arg His Ala Arg Ser Ser Thr Ser Gly
 85 90

<210> 617

<211> 362

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (307)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 617

Ser Arg Val Asp Pro Arg Val Arg Arg Gly Val Pro Tyr Gln Leu Gly
 1 5 10 15

Pro His Gly His Arg Gln Gly Leu Glu Ala Pro Leu Tyr Leu Thr Pro
 20 25 30

Glu Gly Trp Ser Leu Phe Leu Gln Arg Tyr Tyr Gln Val Val His Glu
 35 40 45

Gly Ala Glu Leu Arg His Leu Asp Thr Gln Val Gln Arg Cys Glu Asp
 50 55 60

Ile Leu Gln Gln Leu Gln Ala Val Val Pro Gln Ile Asp Met Glu Gly
 65 70 75 80

Asp Arg Asn Ile Trp Ile Val Lys Pro Gly Ala Lys Ser Arg Gly Arg
 85 90 95

Gly Ile Met Cys Met Asp His Leu Glu Glu Met Leu Lys Leu Val Asn
 100 105 110

Gly Asn Pro Val Val Met Lys Asp Gly Lys Trp Val Val Gln Lys Tyr
 115 120 125

Ile Glu Arg Pro Leu Leu Ile Phe Gly Thr Lys Phe Asp Leu Arg Gln
 130 135 140

577

Trp Phe Leu Val Thr Asp Trp Asn Pro Leu Thr Val Trp Phe Tyr Arg
 145 150 155 160
 Asp Ser Tyr Ile Arg Phe Ser Thr Gln Pro Phe Ser Leu Lys Asn Leu
 165 170 175
 Asp Asn Ser Val His Leu Cys Asn Asn Ser Ile Gln Lys His Leu Glu
 180 185 190
 Asn Ser Cys His Arg His Pro Leu Leu Pro Pro Asp Asn Met Trp Ser
 195 200 205
 Ser Gln Arg Phe Gln Ala His Leu Gln Glu Met Gly Ala Pro Asn Ala
 210 215 220
 Trp Ser Thr Ile Ile Val Pro Gly Met Lys Asp Ala Val Ile His Ala
 225 230 235 240
 Leu Gln Thr Ser Gln Asp Thr Val Gln Cys Arg Lys Ala Ser Phe Glu
 245 250 255
 Leu Tyr Gly Ala Asp Phe Val Phe Gly Glu Asp Phe Gln Pro Trp Leu
 260 265 270
 Ile Glu Ile Asn Ala Ser Pro Thr Met Ala Pro Ser Thr Ala Val Thr
 275 280 285
 Ala Arg Leu Cys Ala Gly Val Gln Ala Asp Thr Leu Arg Val Val Ile
 290 295 300
 Asp Arg Xaa Leu Asp Arg Asn Cys Asp Thr Gly Ala Phe Glu Leu Ile
 305 310 315 320
 Tyr Lys Gln Pro Ala Val Glu Val Pro Gln Tyr Val Gly Ile Arg Leu
 325 330 335
 Leu Val Glu Gly Phe Thr Ile Lys Lys Pro Met Ala Met Cys His Arg
 340 345 350
 Arg Met Gly Val Arg Gln Gln Ser Leu Cys
 355 360

<210> 618

<211> 328

<212> PRT

<213> Homo sapiens

<400> 618

Ile Arg Met Arg Glu Trp Trp Val Gln Val Gly Leu Leu Ala Val Pro
 1 5 10 15
 Leu Leu Ala Ala Tyr Leu His Ile Pro Pro Pro Gln Leu Ser Pro Ala
 20 25 30
 Leu His Ser Trp Lys Ser Ser Gly Lys Phe Phe Thr Tyr Lys Gly Leu
 35 40 45
 Arg Ile Phe Tyr Gln Asp Ser Val Gly Val Val Gly Ser Pro Glu Ile
 50 55 60
 Val Val Leu Leu His Gly Phe Pro Thr Ser Ser Tyr Asp Trp Tyr Lys
 65 70 75 80
 Ile Trp Glu Gly Leu Thr Leu Arg Phe His Arg Val Ile Ala Leu Asp
 85 90 95
 Phe Leu Gly Phe Gly Phe Ser Asp Lys Pro Arg Pro His His Tyr Ser
 100 105 110
 Ile Phe Glu Gln Ala Ser Ile Val Glu Ala Leu Leu Arg His Leu Gly
 115 120 125
 Leu Gln Asn Arg Arg Ile Asn Leu Leu Ser His Asp Tyr Gly Asp Ile
 130 135 140
 Val Ala Gln Glu Leu Leu Tyr Arg Tyr Lys Gln Asn Arg Ser Gly Arg
 145 150 155 160
 Leu Thr Ile Lys Ser Leu Cys Leu Ser Asn Gly Gly Ile Phe Pro Glu
 165 170 175
 Thr His Arg Pro Leu Leu Leu Gln Lys Leu Leu Lys Asp Gly Gly Val
 180 185 190
 Leu Ser Pro Ile Leu Thr Arg Leu Met Asn Phe Phe Val Phe Ser Arg
 195 200 205
 Gly Leu Thr Pro Val Phe Gly Pro Tyr Thr Arg Pro Ser Glu Ser Glu
 210 215 220
 Leu Trp Asp Met Trp Ala Gly Ile Arg Asn Asn Asp Gly Asn Leu Val
 225 230 235 240
 Ile Asp Ser Leu Leu Gln Tyr Ile Asn Gln Arg Lys Lys Phe Arg Arg
 245 250 255
 Arg Trp Val Gly Ala Leu Ala Ser Val Thr Ile Pro Ile His Phe Ile
 260 265 270

579

Tyr Gly Pro Leu Asp Pro Val Asn Pro Tyr Pro Glu Phe Leu Glu Leu
 275 280 285

Tyr Arg Lys Thr Leu Pro Arg Ser Thr Val Ser Ile Leu Asp Asp His
 290 295 300

Ile Ser His Tyr Pro Gln Leu Glu Asp Pro Met Gly Phe Leu Asn Ala
 305 310 315 320

Tyr Met Gly Phe Ile Asn Ser Phe
 325

<210> 619
 <211> 271
 <212> PRT
 <213> Homo sapiens

<400> 619

Asn Met Asp Pro Pro Gly Leu Gln Gly Val Gln Gly Thr Val Ala Ala
 1 5 10 15

Cys Gly Ala Cys Tyr Trp Leu Leu Gly Leu Met Ala Val Arg Ala Ser
 20 25 30

Phe Glu Asn Asn Cys Glu Ile Gly Cys Phe Ala Lys Leu Thr Asn Thr
 35 40 45

Tyr Cys Leu Val Ala Ile Gly Gly Ser Glu Asn Phe Tyr Ser Val Phe
 50 55 60

Glu Gly Glu Leu Ser Asp Thr Ile Pro Val Val His Ala Ser Ile Ala
 65 70 75 80

Gly Cys Arg Ile Ile Gly Arg Met Cys Val Gly Asn Arg His Gly Leu
 85 90 95

Leu Val Pro Asn Asn Thr Thr Asp Gln Glu Leu Gln His Ile Arg Asn
 100 105 110

Ser Leu Pro Asp Thr Val Gln Ile Arg Arg Val Glu Glu Arg Leu Ser
 115 120 125

Ala Leu Gly Asn Val Thr Thr Cys Asn Asp Tyr Val Ala Leu Val His
 130 135 140

Pro Asp Leu Asp Arg Glu Thr Glu Glu Ile Leu Ala Asp Val Leu Lys
 145 150 155 160

Val Glu Val Phe Arg Gln Thr Val Ala Asp Gln Val Leu Val Gly Ser

580

| | | | | | |
|---|-----|--|-----|--|-----|
| | 165 | | 170 | | 175 |
| Tyr Cys Val Phe Ser Asn Gln Gly Gly Leu Val His Pro Lys Thr Ser | | | | | |
| | 180 | | 185 | | 190 |
| Ile Glu Asp Gln Asp Glu Leu Ser Ser Leu Leu Gln Val Pro Leu Val | | | | | |
| | 195 | | 200 | | 205 |
| Ala Gly Thr Val Asn Arg Gly Ser Glu Val Ile Ala Ala Gly Met Val | | | | | |
| | 210 | | 215 | | 220 |
| Val Asn Asp Trp Cys Ala Phe Cys Gly Leu Asp Thr Thr Ser Thr Glu | | | | | |
| | 225 | | 230 | | 235 |
| | | | | | 240 |
| Leu Ser Val Val Glu Ser Val Phe Lys Leu Asn Glu Ala Gln Pro Ser | | | | | |
| | 245 | | 250 | | 255 |
| Thr Ile Ala Thr Ser Met Arg Asp Ser Leu Ile Asp Ser Leu Thr | | | | | |
| | 260 | | 265 | | 270 |

<210> 620

<211> 88

<212> PRT

<213> Homo sapiens

<400> 620

| | | | | | |
|---|----|--|----|--|----|
| Gly Ser Ala Ala Met Lys Val Lys Ile Lys Cys Trp Asn Gly Val Ala | | | | | |
| 1 | 5 | | 10 | | 15 |
| Thr Trp Leu Trp Val Ala Asn Asp Glu Asn Cys Gly Ile Cys Arg Met | | | | | |
| | 20 | | 25 | | 30 |
| Ala Phe Asn Gly Cys Cys Pro Asp Cys Lys Val Pro Gly Asp Asp Cys | | | | | |
| | 35 | | 40 | | 45 |
| Pro Leu Val Trp Gly Gln Cys Ser His Cys Phe His Met His Cys Ile | | | | | |
| | 50 | | 55 | | 60 |
| Leu Lys Trp Leu His Ala Gln Gln Val Gln Gln His Cys Pro Met Cys | | | | | |
| | 65 | | 70 | | 75 |
| | | | | | 80 |
| Arg Gln Glu Trp Lys Phe Lys Glu | | | | | |
| | 85 | | | | |

<210> 621

<211> 46

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (35)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (41)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 621

Ala Gly Thr Ser Arg Ser Glu Gly Lys Arg Ser Ser Val Leu Thr Arg
1 5 10 15

Thr Glu Phe Gln Ile Glu Met Phe Gln Thr Ile Glu Gly Glu Lys Trp
20 25 30

Pro Gly Xaa Ser Ile Asn Leu Ser Xaa Phe His Gly Cys Phe
35 40 45

<210> 622

<211> 103

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (35)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (36)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 622

Gly Arg Pro Thr Arg Pro Arg Gly Arg Gly Arg Ser Ser Ala Cys Leu
1 5 10 15

Leu Leu Glu Gly Asp Gly Pro Ala Arg Leu Trp Ala Pro Thr Ser Pro
20 25 30

Gly Val Xaa Xaa Glu Arg Phe Ala Glu Glu Arg Gly Ser Gly Arg Ala
35 40 45

Leu Asn Ala Gly Pro Lys His Pro Gly Ser Leu His Ser Pro Arg Pro
50 55 60

582

Gln Thr Leu Thr Lys Thr Trp Ile Cys Ser Arg Phe Ser Cys Ser Arg
 65 70 75 80
 Ser Ser Arg Ser Cys Pro Arg Leu Leu Arg Leu Arg Ala Glu Lys Lys
 85 90 95
 Val Cys Gln Ala Trp Thr Gln
 100

<210> 623
 <211> 103
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (60)
 <223> Xaa equals any of the naturally occurring-L-amino acids

<400> 623
 Gly Arg Pro Thr Arg Pro Thr Ser Ser Arg Ser Arg Ala Ala Arg Pro
 1 5 10 15
 Phe Phe Phe Phe Phe Phe Phe Trp Phe Pro Glu Phe Gly Phe Ile Leu
 20 25 30
 Gln Tyr Arg Asn His Leu Glu Pro Ser Glu Thr Asp Ile Pro Glu Ala
 35 40 45
 Glu Ala Leu Ser Asn Gln Tyr Cys Val Ala Leu Xaa Pro Leu Arg Lys
 50 55 60
 Pro His Leu Gly Tyr Lys Arg Ser Phe Tyr Val Tyr Pro Leu Tyr His
 65 70 75 80
 Gly Phe Leu Ser Pro Leu Leu Leu Pro Ile Leu Pro Gly Glu Asn Thr
 85 90 95
 Ala Gln Arg Leu Pro Ser Glu
 100

<210> 624
 <211> 305
 <212> PRT
 <213> Homo sapiens

<220>

<221> SITE

<222> (116)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (117)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (219)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 624

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Gln | Asp | Leu | Trp | Met | Ser | Cys | Pro | Val | Gln | Thr | Met | Asp | Pro | Glu |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Thr | Leu | Leu | Leu | Gln | Cys | Pro | Gly | Gly | Gly | Leu | Pro | Gln | Glu | Gln |
| | | 20 | | | | | | 25 | | | | | 30 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Gln | Ala | Glu | Leu | Ser | Pro | Ala | His | Asp | Arg | Arg | Pro | Leu | Pro | Gly |
| | 35 | | | | | | 40 | | | | | 45 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Asp | Glu | Ala | Ile | Thr | Ala | Ile | Trp | Glu | Thr | Arg | Leu | Lys | Ala | Gln |
| 50 | | | | | | 55 | | | | | 60 | | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pro | Trp | Leu | Phe | Asp | Ala | Pro | Lys | Phe | Arg | Leu | His | Ser | Ala | Thr | Leu |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| Ala | Pro | Ile | Gly | Ser | Arg | Gly | Pro | Gln | Leu | Leu | Arg | Leu | Gly | Leu | |
| | | | 85 | | | | | 90 | | | | | 95 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Ser | Tyr | Arg | Asp | Phe | Leu | Gly | Thr | Asn | Trp | Ser | Ser | Ser | Ala | Ala |
| | | 100 | | | | | 105 | | | | | | 110 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Trp | Leu | Arg | Xaa | Xaa | Gly | Ala | Thr | Asp | Trp | Gly | Asp | Thr | Gln | Ala | Tyr |
| | 115 | | | | | 120 | | | | | | 125 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Ala | Asp | Pro | Leu | Gly | Val | Gly | Ala | Ala | Leu | Ala | Thr | Ala | Asp | Asp |
| 130 | | | | | | 135 | | | | | | 140 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Leu | Val | Phe | Leu | Arg | Arg | Ser | Arg | Gln | Val | Ala | Glu | Ala | Pro | Gly |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Val | Asp | Val | Pro | Gly | Gly | His | Pro | Glu | Pro | Gln | Ala | Leu | Cys | Pro |
| | | | 165 | | | | | 170 | | | | | | 175 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Gly | Ser | Pro | Gln | His | Gln | Asp | Leu | Ala | Gly | Gln | Leu | Val | Val | His |
| | | 180 | | | | | | 185 | | | | | | 190 | |

584

Glu Leu Phe Ser Ser Val Leu Gln Glu Ile Cys Asp Glu Val Asn Leu
 195 200 205
 Pro Leu Leu Thr Leu Ser Gln Pro Leu Leu Xaa Gly Ile Ala Arg Asn
 210 215 220
 Glu Thr Ser Ala Gly Arg Ala Ser Ala Glu Phe Tyr Val Gln Cys Ser
 225 230 235 240
 Leu Thr Ser Glu Gln Val Arg Lys His Tyr Leu Ser Gly Gly Pro Glu
 245 250 255
 Ala His Glu Ser Thr Gly Ile Phe Phe Val Glu Thr Gln Asn Val Arg
 260 265 270
 Arg Leu Pro Glu Thr Glu Met Trp Ala Glu Leu Cys Pro Ser Pro Lys
 275 280 285
 Ala Pro Ser Ser Ser Thr Thr Gly Phe Arg Glu Val Pro Leu Glu Arg
 290 295 300
 Pro
 305

<210> 625
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 625
 Ser Ala Met Lys Ala Ser Gly Thr Leu Arg Glu Tyr Lys Val Val Gly
 1 5 10 15
 Arg Cys Leu Pro Thr Pro Lys Cys Arg Thr Pro Pro Leu Tyr Arg Met
 20 25 30
 Arg Ile Phe Ala Pro Asn His Val Val Ala Lys Ser Arg Phe Trp Tyr
 35 40 45
 Phe Val Ser Gln Leu Lys Lys Met Lys Lys Ser Ser Gly Glu Ile Val
 50 55 60
 Tyr Cys Gly Gln Val Phe Glu Lys Ser Pro Leu Arg Val Lys Asn Phe
 65 70 75 80
 Gly Ile Trp Leu Arg Tyr Asp Ser Arg Ser Gly Thr His Asn Met Tyr
 85 90 95

Arg Gly Val Pro Gly Thr
100

<210> 626
<211> 59
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (36)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 626
Ala Leu Trp Val Lys Ala Trp Arg Gln Glu Ser Glu Gly Gln Phe Gln
1 5 10 15

Glu Thr Gln Phe Ile Asn Phe His Gln His Leu Pro Gly Pro Cys Leu
20 25 30

Gly Thr Glu Xaa Pro Ser Pro Glu Ser Gly His His Phe Pro Phe Gln
35 40 45

Ser Ile Glu Cys Arg Gly Ile Gln Gly Met Gly
50 55

<210> 627
<211> 220
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (93)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 627
Arg Leu Val Val Thr Glu Glu Asp Gly Gly Ala Arg Pro Glu Ala Leu
1 5 10 15

Gly Lys Ile Ala Pro Arg Thr Pro Ala Glu Leu Gly Ala Arg Ala Asp
20 25 30

Gln Glu Leu Val Thr Ala Leu Met Cys Asp Leu Arg Arg Pro Ala Ala
35 40 45

Gly Gly Met Met Asp Leu Ala Tyr Val Cys Glu Trp Glu Lys Trp Ser

586

| | | |
|---|-----|-------------|
| 50 | 55 | 60 |
| Lys Ser Thr His Cys Pro Ser Val Pro Leu Ala Cys Ala Trp Ser Cys | | |
| 65 | 70 | 75 80 |
| Arg Asn Leu Ile Ala Phe Thr Met Asp Leu Arg Thr Xaa Asp Gln Asp | | |
| | 85 | 90 95 |
| Leu Thr Arg Met Ile His Ile Leu Asp Thr Glu His Pro Trp Asp Leu | | |
| | 100 | 105 110 |
| His Ser Ile Pro Ser Glu His His Glu Ala Ile Thr Cys Leu Glu Trp | | |
| | 115 | 120 125 |
| Asp Gln Ser Gly Ser Arg Leu Leu Ser Ala Asp Ala Asp Gly Gln Ile | | |
| | 130 | 135 140 |
| Lys Cys Trp Ser Met Ala Asp His Leu Ala Asn Ser Trp Glu Ser Ser | | |
| | 145 | 150 155 160 |
| Val Gly Ser Leu Val Glu Gly Asp Pro Ile Val Ala Leu Ser Trp Leu | | |
| | 165 | 170 175 |
| His Asn Gly Val Lys Leu Ala Leu His Val Glu Lys Ser Gly Ala Ser | | |
| | 180 | 185 190 |
| Ser Phe Gly Glu Lys Phe Ser Arg Val Lys Phe Ser Pro Val Leu Thr | | |
| | 195 | 200 205 |
| Leu Phe Gly Gly Lys Pro Trp Arg Ala Gly Ser Arg | | |
| | 210 | 215 220 |

<210> 628

<211> 119

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (115)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (117)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 628

Pro Ala Ser Val Glu Val Tyr His Asp Ser Leu Cys Arg Lys Ile Trp

587

```

      1           5           10           15
Arg Glu Asp Asp Lys Trp His Val Ile Phe Arg Ala Asp Gly Trp Glu
      20           25           30
Gln His Ile Thr Ala Arg Tyr Leu Val Gly Ala Asp Gly Ala Asn Ser
      35           40           45
Met Val Arg Arg His Leu Tyr Pro Asp His Gln Ile Arg Lys Tyr Val
      50           55           60
Ala Ile Gln Gln Trp Phe Ala Glu Lys His Pro Val Pro Phe Tyr Ser
      65           70           75           80
Cys Ile Phe Asp Asn Ser Ile Thr Asn Cys Tyr Ser Trp Ser Ile Ser
      85           90           95
Lys Asp Gly Tyr Phe Ile Phe Gly Gly Ala Tyr Pro Met Glu Arg Arg
      100          105          110
Ser Asp Xaa Phe Xaa Asp Ala
      115

```

<210> 629

<211> 39

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (30)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (31)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 629

```

Phe Gly Glu Pro Ser Leu Thr Val Arg Ala Asp Ile Thr Gly Arg Tyr
  1           5           10           15
Ser Ile Val Ser Met Leu Thr Thr Cys Arg Tyr Ser Leu Xaa Xaa His
      20           25           30
Met Lys Lys Val Ser Ser Cys
      35

```

588

<210> 630

<211> 267

<212> PRT

<213> Homo sapiens

<400> 630

```

Ser Ala Ala Leu Pro Gln Pro Thr Pro Pro Leu Thr Leu Pro Gln Ser
  1             5             10             15

Met Val Asn Thr Lys Pro Glu Lys Thr Glu Glu Asp Ser Glu Glu Val
      20             25             30

Arg Glu Gln Lys His Lys Thr Phe Val Glu Lys Tyr Glu Lys Gln Ile
      35             40             45

Lys His Phe Gly Met Leu Arg Arg Trp Asp Asp Ser Gln Lys Tyr Leu
      50             55             60

Ser Asp Asn Val His Leu Val Cys Glu Glu Thr Ala Asn Tyr Leu Val
      65             70             75             80

Ile Trp Cys Ile Asp Leu Glu Val Glu Glu Lys Cys Ala Leu Met Glu
      85             90             95

Gln Val Ala His Gln Thr Ile Val Met Gln Phe Ile Leu Glu Leu Ala
      100            105            110

Lys Ser Leu Lys Val Asp Pro Arg Ala Cys Phe Arg Gln Phe Phe Thr
      115            120            125

Lys Ile Lys Thr Ala Asp Arg Gln Tyr Met Glu Gly Phe Asn Asp Glu
      130            135            140

Leu Glu Ala Phe Lys Glu Arg Val Arg Gly Arg Ala Lys Leu Arg Ile
      145            150            155            160

Glu Lys Ala Met Lys Glu Tyr Glu Glu Glu Glu Arg Lys Lys Arg Leu
      165            170            175

Gly Pro Gly Gly Leu Asp Pro Val Glu Val Tyr Glu Ser Leu Pro Glu
      180            185            190

Glu Leu Gln Lys Cys Phe Asp Val Lys Asp Val Gln Met Leu Gln Asp
      195            200            205

Ala Ile Ser Lys Met Asp Pro Thr Asp Ala Lys Tyr His Met Gln Arg
      210            215            220

Cys Ile Asp Ser Gly Leu Trp Val Pro Asn Ser Lys Ala Ser Glu Ala
      225            230            235            240

```

Pro Lys Thr Gly Asp Glu Lys Asp Val Ser Val
260 265

```
<210> 631
<211> 207
<212> PRT
<213> Homo sapiens
```

```
<220>  
<221> SITE  
<222> (164)  
<223> Xaa equals any of the naturally occurring L-amino acids
```

<400> 631
Pro Thr Gly Thr Gly Ser Gly Val Pro Gly Leu Gly Arg Asn Gly Gly
1 5 10 15

Arg Glu Gly Ala Pro Gly Thr Met Gly Leu Leu Thr Ile Leu Lys Lys
20 25 30

Met Lys Gln Lys Glu Arg Glu Leu Arg Leu Leu Met Leu Gly Leu Asp
35 40 45

Asn Ala Gly Lys Thr Thr Ile Leu Lys Lys Phe Asn Gly Glu Asp Ile
50 55 60

Asp Thr Ile Ser Pro Thr Leu Gly Phe Asn Ile Lys Thr Leu Glu His
65 70 75 80

Arg Gly Phe Lys Leu Asn Ile Trp Asp Val Gly Gly Gln Lys Ser Leu
85 90 95

Arg Ser Tyr Trp Arg Asn Tyr Phe Glu Ser Thr Asp Gly Leu Ile Trp
100 105 110

Val Val Asp Ser Ala Asp Arg Gln Arg Met Gln Asp Cys Gln Arg Glu
115 120 125

Leu Gln Ser Leu Leu Val Glu Glu Arg Leu Ala Gly Ala Thr Leu Leu
130 135 140

Ile Phe Ala Asn Lys Gln Asp Leu Pro Gly Ala Leu Ser Ser Asn Ala
145 150 155 160

Ile Arg Glu Xaa Leu Glu Leu Asp Ser Ile Arg Ser His His Trp Cys

590

165 170 175
 Ile Gln Gly Cys Ser Ala Val Thr Gly Glu Asn Leu Leu Pro Gly Ile
 180 185 190
 Asp Trp Leu Leu Asp Asp Ile Ser Ser Arg Ile Phe Thr Ala Asp
 195 200 205

<210> 632
 <211> 79
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (54)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (60)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (61)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (73)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 632
 Lys Asn Asn Lys Lys Asp Gln Gln Asn Gly Ile Cys Ser His Thr Met
 1 5 10 15
 Ile Lys Thr Tyr Leu Arg Thr Ala Leu Phe Met Gly Lys Arg Ser Leu
 20 25 30
 Ile Asp Ser Gln Phe His Arg Leu Tyr Arg Arg His Gly Leu Gly Arg
 35 40 45
 Pro Gln Gly Asn Leu Xaa Ser Met Val Glu Gly Xaa Xaa Gly Ser Met
 50 55 60
 His His Leu His Trp Pro Glu Gln Xaa Glu Arg Glu Gln Ile Trp
 65 70 75

591

<210> 633
 <211> 293
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (249)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (282)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 633
 Trp Ser Pro Ser Pro Pro Ala Thr Pro Glu Gln Gly Leu Ser Ala Phe
 1 5 10 15
 Tyr Leu Ser Tyr Phe Asp Met Leu Tyr Pro Glu Asp Ser Ser Trp Ala
 20 25 30
 Ala Lys Ala Pro Gly Ala Ser Ser Arg Glu Glu Pro Pro Glu Glu Pro
 35 40 45
 Glu Gln Cys Pro Val Ile Asp Ser Gln Ala Pro Ala Gly Ser Leu Asp
 50 55 60
 Leu Val Pro Gly Gly Leu Thr Leu Glu Glu His Ser Leu Glu Gln Val
 65 70 75 80
 Gln Ser Met Val Val Gly Glu Val Leu Lys Asp Ile Glu Thr Ala Cys
 85 90 95
 Lys Leu Leu Asn Ile Thr Ala Asp Pro Met Asp Trp Ser Pro Ser Asn
 100 105 110
 Val Gln Lys Trp Leu Leu Trp Thr Glu His Gln Tyr Arg Leu Pro Pro
 115 120 125
 Met Gly Lys Ala Phe Gln Glu Leu Ala Gly Lys Glu Leu Cys Ala Met
 130 135 140
 Ser Glu Glu Gln Phe Arg Gln Arg Ser Pro Leu Gly Gly Asp Val Leu
 145 150 155 160
 His Ala His Leu Asp Ile Trp Lys Ser Ala Ala Trp Met Lys Glu Arg
 165 170 175

592

Thr Ser Pro Gly Ala Ile His Tyr Cys Ala Ser Thr Ser Glu Glu Ser
 180 185 190
 Trp Thr Asp Ser Glu Val Asp Ser Ser Cys Ser Gly Gln Pro Ile His
 195 200 205
 Leu Trp Gln Phe Leu Lys Glu Leu Leu Leu Lys Pro His Ser Tyr Gly
 210 215 220
 Arg Phe Ile Arg Trp Leu Asn Lys Glu Lys Gly Ile Phe Lys Ile Glu
 225 230 235 240
 Asp Ser Ala Gln Val Ala Arg Leu Xaa Gly Ile Arg Lys Asn Arg Pro
 245 250 255
 Ala Met Asn Tyr Asp Lys Leu Ser Arg Ser Ile Arg Gln Tyr Tyr Lys
 260 265 270
 Lys Gly Ile Ile Arg Lys Pro Asp Ile Xaa Gln Arg Leu Val Tyr Gln
 275 280 285
 Phe Val His Pro Ile
 290

<210> 634
 <211> 227
 <212> PRT
 <213> Homo sapiens

<400> 634
 Pro Ala Gly Thr Gly Pro Glu Phe Pro Gly Arg Pro Thr Arg Pro Ala
 1 5 10 15
 Glu Glu Glu Glu Glu Asp Glu Glu Glu Glu Glu Glu Glu Glu
 20 25 30
 Glu Glu Glu Glu Glu Pro Gln Gln Arg Gly Gln Gly Glu Lys Ser Ala
 35 40 45
 Thr Pro Ser Arg Lys Ile Leu Asp Pro Asn Thr Gly Glu Pro Ala Pro
 50 55 60
 Val Leu Ser Ser Pro Pro Pro Ala Asp Val Ser Thr Phe Leu Ala Phe
 65 70 75 80
 Pro Ser Pro Glu Lys Leu Leu Arg Leu Gly Pro Lys Ser Ser Val Leu
 85 90 95
 Ile Ala Gln Gln Thr Asp Thr Ser Asp Pro Glu Lys Val Val Ser Ala

593

100 105 110
 Phe Leu Lys Val Ser Ser Val Phe Lys Asp Glu Ala Thr Val Arg Met
 115 120 125
 Ala Val Gln Asp Ala Val Asp Ala Leu Met Gln Lys Ala Phe Asn Ser
 130 135 140
 Ser Ser Phe Asn Ser Asn Thr Phe Leu Thr Arg Leu Leu Val His Met
 145 150 155 160
 Gly Leu Leu Lys Ser Glu Asp Lys Val Lys Ala Ile Ala Asn Leu Tyr
 165 170 175
 Gly Pro Leu Met Ala Leu Asn His Met Val Gln Gln Asp Tyr Phe Pro
 180 185 190
 Lys Ala Leu Ala Pro Leu Leu Leu Ala Phe Val Thr Lys Pro Asn Ser
 195 200 205
 Ala Leu Glu Ser Cys Ser Phe Ala Arg His Ser Leu Leu Gln Thr Leu
 210 215 220
 Tyr Lys Val
 225

 <210> 635
 <211> 126
 <212> PRT
 <213> Homo sapiens

 <400> 635
 Thr Ser Gly Cys Ile Ser Asn Gly Lys Met Ser Ser Asn Val Pro Ala
 1 5 10 15
 Asp Met Ile Asn Leu Arg Leu Ile Leu Val Ser Gly Lys Thr Lys Glu
 20 25 30
 Phe Leu Phe Ser Pro Asn Asp Ser Ala Ser Asp Ile Ala Lys His Val
 35 40 45
 Tyr Asp Asn Trp Pro Met Asp Trp Glu Glu Glu Gln Val Ser Ser Pro
 50 55 60
 Asn Ile Leu Arg Leu Ile Tyr Gln Gly Arg Phe Leu His Gly Asn Val
 65 70 75 80
 Thr Leu Gly Ala Leu Lys Leu Pro Phe Gly Lys Thr Thr Val Met His
 85 90 95

594

Leu Val Ala Arg Glu Thr Leu Pro Glu Pro Asn Ser Gln Gly Gln Arg
 100 105 110

Asn Arg Glu Lys Thr Gly Glu Ser Asn Cys Cys Val Ile Leu
 115 120 125

<210> 636

<211> 195

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (96)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 636

Val Ser Gly Phe Ala Gly Pro Ala Ser Leu Ile Ser Met Lys Leu Leu
 1 5 10 15

Ser Leu Val Ala Val Val Gly Cys Leu Leu Val Pro Pro Ala Glu Ala
 20 25 30

Asn Lys Ser Ser Glu Asp Ile Arg Cys Lys Cys Ile Cys Pro Pro Tyr
 35 40 45

Arg Asn Ile Ser Gly His Ile Tyr Asn Gln Asn Val Ser Gln Lys Asp
 50 55 60

Cys Asn Cys Leu His Val Val Glu Pro Met Pro Val Pro Gly His Asp
 65 70 75 80

Val Glu Ala Tyr Cys Leu Leu Cys Glu Cys Arg Tyr Glu Glu Arg Xaa
 85 90 95

Thr Thr Thr Ile Lys Val Ile Ile Val Ile Tyr Leu Ser Val Val Gly
 100 105 110

Ala Leu Leu Leu Tyr Met Ala Phe Leu Met Leu Val Asp Pro Leu Ile
 115 120 125

Arg Lys Pro Asp Ala Tyr Thr Glu Gln Leu His Asn Glu Glu Glu Asn
 130 135 140

Glu Asp Ala Arg Ser Met Ala Ala Ala Ala Ala Ser Leu Gly Gly Pro
 145 150 155 160

Arg Ala Asn Thr Val Leu Glu Arg Val Glu Gly Ala Gln Gln Arg Trp

595

165 170 175
 Lys Leu Gln Val Gln Glu Gln Arg Lys Thr Val Phe Asp Arg His Lys
 180 185 190
 Met Leu Ser
 195

<210> 637
 <211> 159
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (92)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (115)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (138)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (151)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (156)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 637
 Arg Pro Thr Arg Pro Gly Asn Ser Arg Arg Arg Gly Arg Arg Gly Cys
 1 5 10 15
 Trp Arg Leu Leu Gly Phe Gly Ala Ala Ala Ile Met Pro Gly Ile Val
 20 25 30
 Glu Leu Pro Thr Leu Glu Asp Leu Lys Val Gln Glu Val Lys Val Ser
 35 40 45
 Ser Ser Val Leu Lys Ala Ala Ala His His Tyr Gly Val Gln Cys Asp

596

50 55 60
 Lys Pro Asn Lys Glu Phe Met Leu Cys Arg Trp Glu Glu Lys Asp Pro
 65 70 75 80
 Arg Arg Cys Leu Glu Glu Gly Lys Leu Val Asn Xaa Cys Ala Leu Asp
 85 90 95
 Phe Phe Arg Gln Ile Lys Leu Ser Leu Cys Arg Ala Phe Tyr Arg Leu
 100 105 110
 Leu Asp Xaa His Arg Leu Leu Arg Pro Ala Val Phe Ser Ser Leu Pro
 115 120 125
 Gln Thr Ala Gly Gln Phe Asp Asp Val Xaa Gly Ala Thr Gly Met Val
 130 135 140
 Arg Leu Asn Trp Gly Lys Xaa Ser Ser His Gln Xaa Glu Asn Ser
 145 150 155

<210> 638
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 638
 Phe Ser Arg Asp Lys Val Ser Pro Cys Trp Pro Gly Trp Ser Arg Thr
 1 5 10 15

Pro Gly Leu Arg
 20

<210> 639
 <211> 408
 <212> PRT
 <213> Homo sapiens

<400> 639
 Thr Trp Gly Gln Thr Pro Cys Ser Pro Gly His Gly Gln Arg Pro Ser
 1 5 10 15

Ser Thr Cys Leu Thr Val Gly Pro Gly Gly Gly Pro Ser Leu Gly Arg
 20 25 30

Pro Cys Pro Gln Leu Leu Leu Gln Phe Gly Val Leu Phe Cys Thr Ile
 35 40 45

597

Leu Leu Leu Leu Trp Val Ser Val Phe Leu Tyr Gly Ser Phe Tyr Tyr
 50 55 60

Ser Tyr Met Pro Thr Val Ser His Leu Ser Pro Val His Phe Tyr Tyr
 65 70 75 80

Arg Thr Asp Cys Asp Ser Ser Thr Thr Ser Leu Cys Ser Phe Pro Val
 85 90 95

Ala Asn Val Ser Leu Thr Lys Gly Gly Arg Asp Arg Val Leu Met Tyr
 100 105 110

Gly Gln Pro Tyr Arg Val Thr Leu Glu Leu Glu Leu Pro Glu Ser Pro
 115 120 125

Val Asn Gln Asp Leu Gly Met Phe Leu Val Thr Ile Ser Cys Tyr Thr
 130 135 140

Arg Gly Gly Arg Ile Ile Ser Thr Ser Ser Arg Ser Val Met Leu His
 145 150 155 160

Tyr Arg Ser Asp Leu Leu Gln Met Leu Asp Thr Leu Val Phe Ser Ser
 165 170 175

Leu Leu Leu Phe Gly Phe Ala Glu Gln Lys Gln Leu Leu Glu Val Glu
 180 185 190

Leu Tyr Ala Asp Tyr Arg Glu Asn Ser Tyr Val Pro Thr Thr Gly Ala
 195 200 205

Ile Ile Glu Ile His Ser Lys Arg Ile Gln Leu Tyr Gly Ala Tyr Leu
 210 215 220

Arg Ile His Ala His Phe Thr Gly Leu Arg Tyr Leu Leu Tyr Asn Phe
 225 230 235 240

Pro Met Thr Cys Ala Phe Ile Gly Val Ala Ser Asn Phe Thr Phe Leu
 245 250 255

Ser Val Ile Val Leu Phe Ser Tyr Met Gln Trp Val Trp Gly Gly Ile
 260 265 270

Trp Pro Arg His Arg Phe Ser Leu Gln Val Asn Ile Arg Lys Arg Asp
 275 280 285

Asn Ser Arg Lys Glu Val Gln Arg Arg Ile Ser Ala His Gln Pro Gly
 290 295 300

Pro Glu Gly Gln Glu Glu Ser Thr Pro Gln Ser Asp Val Thr Glu Asp
 305 310 315 320

598

Gly Glu Ser Pro Glu Asp Pro Ser Gly Thr Glu Gly Gln Leu Ser Glu
325 330 335

Glu Glu Lys Pro Asp Gln Gln Pro Leu Ser Gly Glu Glu Glu Leu Glu
340 345 350

Pro Glu Ala Ser Asp Gly Ser Gly Ser Trp Glu Asp Ala Ala Leu Leu
355 360 365

Thr Glu Ala Asn Leu Pro Ala Pro Ala Pro Ala Ser Ala Ser Ala Pro
370 375 380

Val Leu Glu Thr Leu Gly Ser Ser Glu Pro Ala Gly Gly Ala Leu Arg
385 390 395 400

Gln Arg Pro Thr Cys Ser Ser Ser
405

<210> 640

<211> 288

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (10)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (15)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (268)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (271)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (273)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (274)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (276)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (286)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 640

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Ser | Ser | Ser | Ala | Cys | Pro | Ser | Val | Xaa | Ser | Leu | Phe | Val | Xaa | Leu |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Lys | Asn | Pro | His | Asp | Ala | Gln | Gly | His | Pro | Arg | Ala | Ser | Glu | Asp |
| | | | 20 | | | | | 25 | | | | | | 30 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gln | Pro | Ser | Ser | Gly | Lys | Pro | Val | Thr | Ser | Tyr | Pro | Gly | Glu | Cys | Gly |
| | | 35 | | | | | 40 | | | | | 45 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Val | Phe | Thr | Lys | Glu | Ala | Ser | Leu | Glu | Ile | Arg | Asp | Met | Leu | Leu |
| | 50 | | | | | 55 | | | | | 60 | | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Asn | Lys | Val | Pro | Ala | Ala | Ala | Arg | Ala | Gly | Ala | Ile | Ala | Pro | Cys |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Val | Thr | Val | Pro | Ala | Gln | Asn | Thr | Gly | Leu | Gly | Pro | Glu | Lys | Thr |
| | | | 85 | | | | | | 90 | | | | | 95 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Phe | Phe | Gln | Ala | Leu | Gly | Ile | Thr | Thr | Lys | Ile | Ser | Arg | Gly | Thr |
| | | | 100 | | | | | 105 | | | | | | 110 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Glu | Ile | Leu | Ser | Asp | Val | Gln | Leu | Ile | Lys | Thr | Gly | Asp | Lys | Val |
| | 115 | | | | | | 120 | | | | | | 125 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Ala | Ser | Glu | Ala | Thr | Leu | Leu | Asn | Met | Leu | Asn | Ile | Ser | Pro | Phe |
| | 130 | | | | | 135 | | | | | | 140 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Phe | Gly | Leu | Ile | Ile | Gln | Gln | Val | Phe | Asp | Asn | Gly | Ser | Ile | Tyr |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Pro | Glu | Val | Leu | Asp | Ile | Thr | Glu | Glu | Thr | Leu | His | Ser | Arg | Phe |
| | | | 165 | | | | | | 170 | | | | | 175 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Glu | Gly | Val | Arg | Asn | Val | Ala | Ser | Val | Cys | Leu | Gln | Ile | Gly | Tyr |
| | | 180 | | | | | | | 185 | | | | | 190 | |

600

Pro Thr Val Ala Ser Val Pro His Ser Ile Ile Asn Gly Tyr Lys Arg
 195 200 205
 Val Leu Ala Leu Ser Val Glu Thr Asp Tyr Thr Phe Pro Leu Ala Glu
 210 215 220
 Lys Val Lys Ala Phe Leu Ala Asp Pro Ser Ala Phe Val Ala Ala Ala
 225 230 235 240
 Pro Val Ala Ala Ala Thr Thr Ala Ala Pro Ala Ala Ala Ala Pro
 245 250 255
 Ala Lys Val Glu Ala Lys Glu Glu Ser Glu Glu Xaa Asp Glu Xaa Ile
 260 265 270
 Xaa Xaa Ser Xaa Ile Ser Lys Ser Asn Asn Ser Ser Gln Xaa Ile Val
 275 280 285

<210> 641
 <211> 444
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (34)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 641
 Asn Glu Gln Asp Asn Cys Val Leu Ile His Asp Val Asp Gln Arg Asn
 1 5 10 15
 Ser Asp Lys Asp Ile Phe Gly Asp Ala Cys Asp Asn Cys Leu Ser Val
 20 25 30
 Leu Xaa Asn Asp Gln Lys Asp Thr Asp Gly Asp Gly Arg Gly Asp Ala
 35 40 45
 Cys Asp Asp Asp Met Asp Gly Asp Gly Ile Lys Asn Ile Leu Asp Asn
 50 55 60
 Cys Pro Lys Phe Pro Asn Arg Asp Gln Arg Asp Lys Asp Gly Asp Gly
 65 70 75 80
 Val Gly Asp Ala Cys Asp Ser Cys Pro Asp Val Ser Asn Pro Asn Gln
 85 90 95

601

Ser Asp Val Asp Asn Asp Leu Val Gly Asp Ser Cys Asp Thr Asn Gln
 100 105 110
 Asp Ser Asp Gly Asp Gly His Gln Asp Ser Thr Asp Asn Cys Pro Thr
 115 120 125
 Val Ile Asn Ser Ala Gln Leu Asp Thr Asp Lys Asp Gly Ile Gly Asp
 130 135 140
 Glu Cys Asp Asp Asp Asp Asp Asn Asp Gly Ile Pro Asp Leu Val Pro
 145 150 155 160
 Pro Gly Pro Asp Asn Cys Arg Leu Val Pro Asn Pro Ala Gln Glu Asp
 165 170 175
 Ser Asn Ser Asp Gly Val Gly Asp Ile Cys Glu Ser Asp Phe Asp Gln
 180 185 190
 Asp Gln Val Ile Asp Arg Ile Asp Val Cys Pro Glu Asn Ala Glu Val
 195 200 205
 Thr Leu Thr Asp Phe Arg Ala Tyr Gln Thr Val Val Leu Asp Pro Glu
 210 215 220
 Gly Asp Ala Gln Ile Asp Pro Asn Trp Val Val Leu Asn Gln Gly Met
 225 230 235 240
 Glu Ile Val Gln Thr Met Asn Ser Asp Pro Gly Leu Ala Val Gly Tyr
 245 250 255
 Thr Ala Phe Asn Gly Val Asp Phe Glu Gly Thr Phe His Val Asn Thr
 260 265 270
 Gln Thr Asp Asp Asp Tyr Ala Gly Phe Ile Phe Gly Tyr Gln Asp Ser
 275 280 285
 Ser Ser Phe Tyr Val Val Met Trp Lys Gln Thr Glu Gln Thr Tyr Trp
 290 295 300
 Gln Ala Thr Pro Phe Arg Ala Val Ala Glu Pro Gly Ile Gln Leu Lys
 305 310 315 320
 Ala Val Lys Ser Lys Thr Gly Pro Gly Glu His Leu Arg Asn Ser Leu
 325 330 335
 Trp His Thr Gly Asp Thr Ser Asp Gln Val Arg Leu Leu Trp Lys Asp
 340 345 350
 Ser Arg Asn Val Gly Trp Lys Asp Lys Val Ser Tyr Arg Trp Phe Leu
 355 360 365

602

Gln His Arg Pro Gln Val Gly Tyr Ile Arg Val Arg Phe Tyr Glu Gly
 370 375 380

Ser Glu Leu Val Ala Asp Ser Gly Val Thr Ile Asp Thr Thr Met Arg
 385 390 395 400

Gly Gly Arg Leu Gly Val Phe Cys Phe Ser Gln Glu Asn Ile Ile Trp
 405 410 415

Ser Asn Leu Lys Tyr Arg Cys Asn Asp Thr Ile Pro Glu Asp Phe Gln
 420 425 430

Glu Phe Gln Thr Gln Asn Phe Asp Arg Phe Asp Asn
 435 440

<210> 642

<211> 326

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (50)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (296)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 642

Ser Ala Arg Ala Ser Asp Leu Gly Ala Pro Arg Thr Trp Thr Gly Ala
 1 5 10 15

Ala Ala Gly Pro Arg Thr Pro Ser Ala His Ile Pro Val Pro Ala Gln
 20 25 30

Arg Ala Thr Pro Gly Lys Ala Arg Leu Asp Glu Val Met Ala Ala Ala
 35 40 45

Ala Xaa Thr Ser Leu Ser Thr Ser Pro Leu Leu Leu Gly Ala Pro Val
 50 55 60

Ala Ala Phe Ser Pro Glu Pro Gly Leu Glu Pro Trp Lys Glu Ala Leu
 65 70 75 80

Val Arg Pro Pro Gly Ser Tyr Ser Ser Ser Ser Asn Ser Gly Asp Trp
 85 90 95

603

Gly Trp Asp Leu Ala Ser Asp Gln Ser Ser Pro Ser Thr Pro Ser Pro
 100 105 110
 Pro Leu Pro Pro Glu Ala Ala His Phe Leu Phe Gly Glu Pro Thr Leu
 115 120 125
 Arg Lys Arg Lys Ser Pro Ala Gln Val Met Phe Gln Cys Leu Trp Lys
 130 135 140
 Ser Cys Gly Lys Val Leu Ser Thr Ala Ser Ala Met Gln Arg His Ile
 145 150 155 160
 Arg Leu Val His Leu Gly Arg Gln Ala Glu Pro Asp Gln Ser Asp Gly
 165 170 175
 Glu Glu Asp Phe Tyr Tyr Thr Glu Leu Asp Val Gly Val Asp Thr Leu
 180 185 190
 Thr Asp Gly Leu Ser Ser Leu Thr Pro Val Ser Pro Thr Ala Ser Met
 195 200 205
 Pro Pro Ala Phe Pro Arg Leu Glu Leu Pro Glu Leu Leu Glu Pro Pro
 210 215 220
 Ala Leu Pro Ser Pro Leu Arg Pro Pro Ala Pro Pro Leu Pro Pro Pro
 225 230 235 240
 Pro Val Leu Ser Thr Val Ala Asn Pro Gln Ser Cys His Ser Asp Arg
 245 250 255
 Val Tyr Gln Gly Cys Leu Thr Pro Ala Arg Leu Glu Pro Gln Pro Thr
 260 265 270
 Glu Val Gly Ala Cys Pro Pro Ala Leu Ser Ser Arg Ile Gly Val Thr
 275 280 285
 Leu Arg Lys Pro Arg Gly Asp Xaa Lys Lys Cys Arg Lys Val Tyr Gly
 290 295 300
 Met Glu Arg Arg Asp Leu Trp Cys Thr Ala Cys Arg Trp Lys Lys Ala
 305 310 315 320
 Cys Gln Arg Phe Leu Asp
 325

<210> 643

<211> 129

<212> PRT

<213> Homo sapiens

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (94)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (103)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 643
Asp Val Arg Leu Ser Gly Arg Asn Xaa Xaa Val Asp Val Xaa Asp His
1 5 10 15

605

Gln Xaa Xaa Leu Leu Glu Gln Xaa Asp Leu Leu Ala Gly Leu Ile Ser
 20 25 30
 Asn Ser Ser Asp Ala Xaa Asp Lys Ile Arg Tyr Glu Ser Leu Thr Asp
 35 40 45
 Pro Ser Lys Leu Asp Ser Gly Lys Glu Leu His Ile Asn Leu Ile Pro
 50 55 60
 Asn Lys Gln Asp Arg Thr Leu Thr Ile Val Gly Tyr Arg Asp Arg Met
 65 70 75 80
 Thr Lys Ala Asp Leu Ile Asn Asn Leu Gly Thr Ile Ala Xaa Ser Gly
 85 90 95
 Thr Lys Ala Phe Met Glu Xaa Leu Gln Ala Gly Ala Asp Ile Ser Met
 100 105 110
 Ile Gly Gln Phe Gly Val Gly Phe Tyr Ser Ala Tyr Leu Val Ala Arg
 115 120 125
 Arg

<210> 644

<211> 156

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (12)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 644

Ser Thr His Ala Ser Ala Ser Arg Arg Leu Leu Xaa Asp Val Cys Gln
 1 5 10 15
 Asp Cys Ile Gln Met Val Thr Asp Ile Gln Thr Ala Val Arg Thr Asn
 20 25 30
 Ser Thr Phe Val Glu Ala Leu Val Asp His Ala Lys Ala Gln Cys Asp
 35 40 45
 Leu Leu Gly Pro Gly Met Ala Asp Met Cys Lys Asn Tyr Ile Asn Gln
 50 55 60
 Tyr Ser Asp Ile Ala Val Gln Met Met Met His Met Gln Pro Lys Glu
 65 70 75 80

606

Ile Cys Gly Leu Val Gly Phe Cys Asp Gln Val Lys Glu Met Pro Met
 85 90 95

Gln Thr Leu Ile Pro Ala Lys Ala Val Ser Glu Asn Val Ile Pro Ala
 100 105 110

Leu Glu Leu Val Glu Pro Ile Lys Lys Asp Thr Val Gln Ala Lys Thr
 115 120 125

Ser Val Ser Cys Gly Asp Met Arg Val Thr Trp Leu Lys Glu Val Ala
 130 135 140

Lys Leu His Trp Thr Thr Thr Gly Leu Arg Lys Lys
 145 150 155

<210> 645

<211> 115

<212> PRT

<213> Homo sapiens

<400> 645

Ala Asp Pro Gly Val Gly Ala Val Pro Gly Leu Ala Ala Asp Leu Ala
 1 5 10 15

Thr Ala Ala Arg Ser Leu Gly Pro Ala Leu Val Leu Asp Leu Gly Arg
 20 25 30

Pro Pro Ser Pro Asp Pro His Glu Gly Pro Ser Pro Ser Pro Arg Arg
 35 40 45

Ser Pro Asp Leu Val Arg Gly Pro Gly Pro Gly Leu Gly Pro Gly Val
 50 55 60

Leu Pro Gln Cys Pro Arg Gly Asn Pro Asn Pro Gly Arg Asp Arg Arg
 65 70 75 80

Val Pro Pro Ser Leu Leu Lys Arg Lys Glu Arg Cys Pro Leu Lys Lys
 85 90 95

Met Val Met Ser Gly Asn Pro Arg His Ile Thr Leu Ile His Lys Trp
 100 105 110

Asp Leu Gly
 115

<210> 646

607

<211> 153
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (127)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 646

Tyr Met Pro Asn Gly Ser Leu Asn Glu Leu Leu His Arg Lys Thr Glu
 1 5 10 15
 Tyr Pro Asp Val Ala Trp Pro Leu Arg Phe Arg Ile Leu His Glu Ile
 20 25 30
 Ala Leu Gly Val Asn Tyr Leu His Asn Met Thr Pro Pro Leu Leu His
 35 40 45
 His Asp Leu Lys Thr Gln Asn Ile Leu Leu Asp Asn Glu Phe His Val
 50 55 60
 Lys Ile Ala Asp Phe Gly Leu Ser Lys Trp Arg Met Met Ser Leu Ser
 65 70 75 80
 Gln Ser Arg Ser Ser Lys Ser Ala Pro Glu Gly Gly Thr Ile Ile Tyr
 85 90 95
 Met Pro Pro Glu Asn Tyr Glu Pro Gly Gln Lys Ser Arg Ala Ser Ile
 100 105 110
 Lys His Asp Ile Tyr Ser Tyr Ala Val Ile Thr Trp Glu Val Xaa Ser
 115 120 125
 Arg Lys Gln Pro Phe Glu Asp Val Thr Asn Pro Leu Gln Ile Met Tyr
 130 135 140
 Ser Val Ser Gln Gly His Trp Thr Gly
 145 150

<210> 647
 <211> 220
 <212> PRT
 <213> Homo sapiens

<400> 647

Ala Ser Glu Gln Gly Ala Val Gly Gln Gly Gly Leu Ala Gly Val Pro
 1 5 10 15

608

Thr Leu Thr Ser Leu Pro Ser Ser Cys Pro Glu Pro Arg Pro Ser Met
 20 25 30
 Asp Ala Val Asp Ala Thr Met Glu Lys Leu Arg Ala Gln Cys Leu Ser
 35 40 45
 Arg Gly Ala Ser Gly Ile Gln Gly Leu Ala Arg Phe Phe Arg Gln Leu
 50 55 60
 Asp Arg Asp Gly Ser Arg Ser Leu Asp Ala Asp Glu Phe Arg Gln Gly
 65 70 75 80
 Leu Ala Lys Leu Gly Leu Val Leu Asp Gln Ala Glu Ala Glu Gly Val
 85 90 95
 Cys Arg Lys Trp Asp Arg Asn Gly Ser Gly Thr Leu Asp Leu Glu Glu
 100 105 110
 Phe Leu Arg Ala Leu Arg Pro Pro Met Ser Gln Ala Arg Glu Ala Val
 115 120 125
 Ile Ala Ala Ala Phe Ala Lys Leu Asp Arg Ser Gly Asp Gly Val Val
 130 135 140
 Thr Val Asp Asp Leu Arg Gly Val Tyr Ser Gly Arg Ala His Pro Lys
 145 150 155 160
 Val Arg Ser Gly Glu Trp Thr Glu Asp Glu Val Leu Arg Arg Phe Leu
 165 170 175
 Asp Asn Phe Asp Ser Ser Glu Lys Asp Gly Gln Val Thr Leu Ala Glu
 180 185 190
 Phe Gln Asp Tyr Tyr Ser Gly Val Ser Ala Ser Met Asn Thr Asp Glu
 195 200 205
 Glu Phe Val Ala Met Met Thr Ser Ala Trp Gln Leu
 210 215 220

<210> 648

<211> 118

<212> PRT

<213> Homo sapiens

<400> 648

Asp Asn Arg Thr Leu Thr Lys Gly Pro Asp Thr Val Gly Thr Met Gly
 1 5 10 15

Gln Cys Arg Ser Ala Asn Ala Glu Asp Ala Gln Glu Phe Ser Asp Val

609

```

                20                25                30
Glu Arg Ala Ile Glu Thr Leu Ile Lys Asn Phe His Gln Tyr Ser Val
   35                40                45
Glu Gly Gly Lys Glu Thr Leu Thr Pro Ser Glu Leu Arg Asp Leu Val
   50                55                60
Thr Gln Gln Leu Pro His Leu Met Pro Ser Asn Cys Gly Leu Glu Glu
   65                70                75                80
Lys Ile Ala Asn Leu Gly Ser Cys Asn Asp Ser Lys Leu Glu Phe Arg
   85                90                95
Ser Phe Trp Glu Leu Ile Gly Glu Ala Ala Lys Ser Val Lys Leu Glu
  100                105                110
Arg Pro Val Arg Gly His
   115

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<210> 649

<211> 309

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (77)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (160)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 649

```

Asp His His Gln Gly Ala Glu Ser Val Pro Gly Ile Gly Val Ser Pro
  1                5                10                15

```

```

Thr Ser Ser Ser Ser Cys Pro Pro Thr Ser Cys Thr Gln Pro Val Thr
   20                25                30

```

```

Thr Trp Ser Pro Gly Leu Arg Val Glu Ser Leu Asp Gly Ala Lys Thr
   35                40                45

```

```

Gly Lys Gly Ala Leu Thr Gly Ala Pro Gly Ser Phe Gly Ser Ser Glu
   50                55                60

```

```

Phe Leu Thr Gly Leu Arg Asn Thr Ser Glu Ala Arg Xaa Thr Arg Gly

```

610

| | | | |
|---|-----|-----|-----|
| 65 | 70 | 75 | 80 |
| Pro Ile Met Gln Glu Pro Arg Arg Val Thr Pro Cys Leu Gly Lys Arg | 85 | 90 | 95 |
| Gly Val Lys Thr Pro Gln Leu Gln Pro Gly Ser Ala Phe Leu Pro Arg | 100 | 105 | 110 |
| Val Arg Arg Gln Ser Phe Pro Ala Arg Ser Asp Ser Tyr Thr Thr Val | 115 | 120 | 125 |
| Arg Asp Phe Leu Ala Val Pro Arg Thr Ile Ser Ser Ala Ser Ala Thr | 130 | 135 | 140 |
| Leu Ile Met Ala Val Ala Val Ser His Phe Arg Pro Gly Pro Glu Xaa | 145 | 150 | 155 |
| Trp Asp Thr Ala Ser Met Ala Ala Ser Lys Val Lys Gln Asp Met Pro | 165 | 170 | 175 |
| Pro Pro Gly Gly Tyr Gly Pro Ile Asp Tyr Lys Arg Asn Leu Pro Arg | 180 | 185 | 190 |
| Arg Gly Leu Ser Gly Tyr Ser Met Leu Ala Ile Gly Ile Gly Thr Leu | 195 | 200 | 205 |
| Ile Tyr Gly His Trp Ser Ile Met Lys Trp Asn Arg Glu Arg Arg Arg | 210 | 215 | 220 |
| Leu Gln Ile Glu Asp Phe Glu Ala Arg Ile Ala Leu Leu Pro Leu Leu | 225 | 230 | 235 |
| Gln Ala Glu Thr Asp Arg Arg Thr Leu Gln Met Leu Arg Glu Asn Leu | 245 | 250 | 255 |
| Glu Glu Glu Ala Ile Ile Met Lys Asp Val Pro Asp Trp Lys Val Gly | 260 | 265 | 270 |
| Glu Ser Val Phe His Thr Thr Arg Trp Val Pro Pro Leu Ile Gly Glu | 275 | 280 | 285 |
| Leu Tyr Gly Leu Arg Thr Thr Glu Glu Ala Leu His Ala Ser His Gly | 290 | 295 | 300 |
| Phe Met Trp Tyr Thr | 305 | | |

<210> 650

<211> 286

611

<212> PRT

<213> Homo sapiens

<400> 650

```

Ile Pro Thr Leu Ile Thr Ala Phe Val Leu Ala Thr Ser Gln Ala Gln
 1             5             10             15

Ala Gly Trp Leu Gln His Asp Tyr Gly His Leu Ser Val Tyr Arg Lys
      20             25             30

Pro Lys Trp Asn His Leu Val His Lys Phe Val Ile Gly His Leu Lys
      35             40             45

Gly Ala Ser Ala Asn Trp Trp Asn His Arg His Phe Gln His His Ala
      50             55             60

Lys Pro Asn Ile Phe His Lys Asp Pro Asp Val Asn Met Leu His Val
      65             70             75             80

Phe Val Leu Gly Glu Trp Gln Pro Ile Glu Tyr Gly Lys Lys Lys Leu
      85             90             95

Lys Tyr Leu Pro Tyr Asn His Gln His Glu Tyr Phe Phe Leu Ile Gly
      100            105            110

Pro Pro Leu Leu Ile Pro Met Tyr Phe Gln Tyr Gln Ile Ile Met Thr
      115            120            125

Met Ile Val His Lys Asn Trp Val Asp Leu Ala Trp Ala Val Ser Tyr
      130            135            140

Tyr Ile Arg Phe Phe Ile Thr Tyr Ile Pro Phe Tyr Gly Ile Leu Gly
      145            150            155            160

Ala Leu Leu Phe Leu Asn Phe Ile Arg Phe Leu Glu Ser His Trp Phe
      165            170            175

Val Trp Val Thr Gln Met Asn His Ile Val Met Glu Ile Asp Gln Glu
      180            185            190

Ala Tyr Arg Asp Trp Phe Ser Ser Gln Leu Thr Ala Thr Cys Asn Val
      195            200            205

Glu Gln Ser Phe Phe Asn Asp Trp Phe Ser Gly His Leu Asn Phe Gln
      210            215            220

Ile Glu His His Leu Phe Pro Thr Met Pro Arg His Asn Leu His Lys
      225            230            235            240

Ile Ala Pro Leu Val Lys Ser Leu Cys Ala Lys His Gly Ile Glu Tyr
      245            250            255

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612

Gln Glu Lys Pro Leu Leu Arg Ala Leu Leu Asp Ile Ile Arg Ser Leu
 260 265 270

Lys Lys Ser Gly Lys Leu Trp Leu Asp Ala Tyr Leu His Lys
 275 280 285

<210> 651

<211> 184

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (35)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (57)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (71)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (106)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 651

Glu Arg Gly Pro Ile Pro Val Cys Pro His Lys Ala Ala Ser Ser Val
 1 5 10 15

Ile Ser Leu Leu Arg Ala Glu Leu Arg Leu Tyr Thr Asp Pro His Lys
 20 25 30

Tyr His Xaa Phe Cys Leu Arg Lys Asp Lys Ala His Val Cys Phe Cys
 35 40 45

Phe Arg Phe Leu Phe Ser Phe Phe Xaa Glu Ala Leu Trp Arg Ser Met
 50 55 60

Phe Leu Leu Ser Phe Leu Xaa Lys Pro Ser Phe Trp Ala Thr Gly Leu
 65 70 75 80

Ile Leu Ser Thr Ser Ser Phe Pro Pro Phe Ser Ile Val Ser Leu Pro

613

85 90 95
 Pro Ser His Pro Thr Arg Ala Pro Leu Xaa Leu Ser Phe Pro Ser Ser
 100 105 110
 Pro Ala Val Ser Phe Leu Arg Ser Gly Thr Lys Leu Ile Phe Arg Arg
 115 120 125
 Arg Pro Arg Gln Lys Glu Ala Gly Leu Ser Gln Ser His Asp Asp Leu
 130 135 140
 Ser Asn Ala Thr Ala Thr Pro Ser Val Arg Lys Lys Ala Gly Ser Phe
 145 150 155 160
 Ser Arg Arg Leu Ile Lys Arg Phe Ser Phe Lys Ser Lys Pro Lys Ala
 165 170 175
 Asn Gly Asn Pro Ser Pro Gln Leu
 180

<210> 652

<211> 641

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (438)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 652

Gln Gly Ser Glu Pro Ser Ser Glu Asn Ala Asn Asp Thr Ile Ile Leu
 1 5 10 15
 Arg Asn Leu Asn Pro His Ser Thr Met Asp Ser Ile Leu Gly Ala Leu
 20 25 30
 Ala Pro Tyr Ala Val Leu Ser Ser Ser Asn Val Arg Val Ile Lys Asp
 35 40 45
 Lys Gln Thr Gln Leu Asn Arg Gly Phe Ala Phe Ile Gln Leu Ser Thr
 50 55 60
 Ile Glu Ala Ala Gln Leu Leu Gln Ile Leu Gln Ala Leu His Pro Pro
 65 70 75 80
 Leu Thr Ile Asp Gly Lys Thr Ile Asn Val Glu Phe Ala Lys Gly Ser
 85 90 95

614

Lys Arg Asp Met Ala Ser Asn Glu Gly Ser Arg Ile Ser Ala Ala Ser
 100 105 110
 Val Ala Ser Thr Ala Ile Ala Ala Ala Gln Trp Ala Ile Ser Gln Ala
 115 120 125
 Ser Gln Gly Gly Glu Gly Thr Trp Ala Thr Ser Glu Glu Pro Pro Val
 130 135 140
 Asp Tyr Ser Tyr Tyr Gln Gln Asp Glu Gly Tyr Gly Asn Ser Gln Gly
 145 150 155 160
 Thr Glu Ser Ser Leu Tyr Ala His Gly Tyr Leu Lys Gly Thr Lys Gly
 165 170 175
 Pro Gly Ile Thr Gly Thr Lys Gly Asp Pro Thr Gly Ala Gly Pro Glu
 180 185 190
 Ala Ser Leu Glu Pro Gly Ala Asp Ser Val Ser Met Gln Ala Phe Ser
 195 200 205
 Arg Ala Gln Pro Gly Ala Ala Pro Gly Ile Tyr Gln Gln Ser Ala Glu
 210 215 220
 Ala Ser Ser Ser Gln Gly Thr Ala Ala Asn Ser Gln Ser Tyr Thr Ile
 225 230 235 240
 Met Ser Pro Ala Val Leu Lys Ser Glu Leu Gln Ser Pro Thr His Pro
 245 250 255
 Ser Ser Ala Leu Pro Pro Ala Thr Ser Pro Thr Ala Gln Glu Ser Tyr
 260 265 270
 Ser Gln Tyr Pro Val Pro Asp Val Ser Thr Tyr Gln Tyr Asp Glu Thr
 275 280 285
 Ser Gly Tyr Tyr Tyr Asp Pro Gln Thr Gly Leu Tyr Tyr Asp Pro Asn
 290 295 300
 Ser Gln Tyr Tyr Tyr Asn Ala Gln Ser Gln Gln Tyr Leu Tyr Trp Asp
 305 310 315 320
 Gly Glu Arg Arg Thr Tyr Val Pro Ala Leu Glu Gln Ser Ala Asp Gly
 325 330 335
 His Lys Glu Thr Gly Ala Pro Ser Lys Glu Gly Lys Glu Lys Lys Glu
 340 345 350
 Lys His Lys Thr Lys Thr Ala Gln Gln Ile Ala Lys Asp Met Glu Arg
 355 360 365

615

Trp Ala Arg Ser Leu Asn Lys Gln Lys Glu Asn Phe Lys Asn Ser Phe
 370 375 380
 Gln Pro Ile Ser Ser Leu Arg Asp Asp Glu Arg Arg Glu Ser Ala Thr
 385 390 395 400
 Ala Asp Ala Gly Tyr Ala Ile Leu Glu Lys Lys Gly Ala Leu Ala Glu
 405 410 415
 Arg Gln His Thr Ser Met Asp Leu Pro Lys Leu Ala Ser Asp Asp Arg
 420 425 430
 Pro Ser Pro Pro Arg Xaa Leu Val Ala Ala Tyr Ser Gly Glu Ser Asp
 435 440 445
 Ser Glu Glu Glu Gln Glu Arg Gly Gly Pro Glu Arg Glu Glu Lys Leu
 450 455 460
 Thr Asp Trp Gln Lys Leu Ala Cys Leu Leu Cys Arg Arg Gln Phe Pro
 465 470 475 480
 Ser Lys Glu Ala Leu Ile Arg His Gln Gln Leu Ser Gly Leu His Lys
 485 490 495
 Gln Asn Leu Glu Ile His Arg Arg Ala His Leu Ser Glu Asn Glu Leu
 500 505 510
 Glu Ala Leu Glu Lys Asn Asp Met Glu Gln Met Lys Tyr Arg Asp Arg
 515 520 525
 Ala Ala Glu Arg Arg Glu Lys Tyr Gly Ile Pro Glu Pro Pro Glu Pro
 530 535 540
 Lys Arg Arg Lys Tyr Gly Gly Ile Ser Thr Ala Ser Val Asp Phe Glu
 545 550 555 560
 Gln Pro Thr Arg Asp Gly Leu Gly Ser Asp Asn Ile Gly Ser Arg Met
 565 570 575
 Leu Gln Ala Met Gly Trp Lys Glu Gly Ser Gly Leu Gly Arg Lys Lys
 580 585 590
 Gln Gly Ile Val Thr Pro Ile Glu Ala Gln Thr Arg Val Arg Gly Ser
 595 600 605
 Gly Leu Gly Ala Arg Gly Ser Ser Tyr Gly Val Thr Ser Thr Glu Ser
 610 615 620
 Tyr Lys Glu Thr Leu His Lys Thr Met Val Thr Arg Phe Asn Glu Ala
 625 630 635 640

616

Gln

<210> 653

<211> 516

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (247)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 653

Xaa Thr Arg Pro Gly Arg Gln Thr Arg Leu Cys Arg Pro Ala Ile Ser
 1 5 10 15

Leu Leu Trp Leu Val Thr Pro Gly Val Pro Ala Phe Ser Gly Trp Gly
 20 25 30

Arg Arg His Arg Gly Arg Thr Gly Arg Arg Ala Met Ala Ser Cys Val
 35 40 45

Gly Ser Arg Thr Leu Ser Lys Asp Asp Val Asn Tyr Lys Met His Phe
 50 55 60

Arg Met Ile Asn Glu Gln Gln Val Glu Asp Ile Thr Ile Asp Phe Phe
 65 70 75 80

Tyr Arg Pro His Thr Ile Thr Leu Leu Ser Phe Thr Ile Val Ser Leu
 85 90 95

Met Tyr Phe Ala Phe Thr Arg Asp Asp Ser Val Pro Glu Asp Asn Ile
 100 105 110

Trp Arg Gly Ile Leu Ser Val Ile Phe Phe Phe Leu Ile Ile Ser Val
 115 120 125

Leu Ala Phe Pro Asn Gly Pro Phe Thr Arg Pro His Pro Ala Leu Trp
 130 135 140

Arg Met Val Phe Gly Leu Ser Val Leu Tyr Phe Leu Phe Leu Val Phe
 145 150 155 160

Leu Leu Phe Leu Asn Phe Glu Gln Val Lys Ser Leu Met Tyr Trp Leu
 165 170 175
 Asp Pro Asn Leu Arg Tyr Ala Thr Arg Glu Ala Asp Val Met Glu Tyr
 180 185 190
 Ala Val Asn Cys His Val Ile Thr Trp Glu Arg Ile Ile Ser His Phe
 195 200 205
 Asp Ile Phe Ala Phe Gly His Phe Trp Gly Trp Ala Met Lys Ala Leu
 210 215 220
 Leu Ile Arg Ser Tyr Gly Leu Cys Trp Thr Ile Ser Ile Thr Trp Glu
 225 230 235 240
 Leu Thr Glu Leu Phe Phe Xaa His Leu Leu Pro Asn Phe Ala Glu Cys
 245 250 255
 Trp Trp Asp Gln Val Ile Leu Asp Ile Leu Leu Cys Asn Gly Gly Gly
 260 265 270
 Ile Trp Leu Gly Met Val Val Cys Arg Phe Leu Glu Met Arg Thr Tyr
 275 280 285
 His Trp Ala Ser Phe Lys Asp Ile His Thr Thr Thr Gly Lys Ile Lys
 290 295 300
 Arg Ala Val Leu Gln Phe Thr Pro Ala Ser Trp Thr Tyr Val Arg Trp
 305 310 315 320
 Phe Asp Pro Lys Ser Ser Phe Gln Arg Val Ala Gly Val Tyr Leu Phe
 325 330 335
 Met Ile Ile Trp Gln Leu Thr Glu Leu Asn Thr Phe Phe Leu Lys His
 340 345 350
 Ile Phe Val Phe Gln Ala Ser His Pro Leu Ser Trp Gly Arg Ile Leu
 355 360 365
 Phe Ile Gly Gly Ile Thr Ala Pro Thr Val Arg Gln Tyr Tyr Ala Tyr
 370 375 380
 Leu Thr Asp Thr Gln Cys Lys Arg Val Gly Thr Gln Cys Trp Val Phe
 385 390 395 400
 Gly Val Ile Gly Phe Leu Glu Ala Ile Val Cys Ile Lys Phe Gly Gln
 405 410 415
 Asp Leu Phe Ser Lys Thr Gln Ile Leu Tyr Val Val Leu Trp Leu Leu
 420 425 430

618

Cys Val Ala Phe Thr Thr Phe Leu Cys Leu Tyr Gly Met Ile Trp Tyr
 435 440 445
 Ala Glu His Tyr Gly His Arg Glu Lys Thr Tyr Ser Glu Cys Glu Asp
 450 455 460
 Gly Thr Tyr Ser Pro Glu Ile Ser Trp His His Arg Lys Gly Thr Lys
 465 470 475 480
 Gly Ser Glu Asp Ser Pro Pro Lys His Ala Gly Asn Asn Glu Ser His
 485 490 495
 Ser Ser Arg Arg Arg Asn Arg His Ser Lys Ser Lys Val Thr Asn Gly
 500 505 510
 Val Gly Lys Lys
 515

<210> 654
 <211> 663
 <212> PRT
 <213> Homo sapiens

<400> 654
 Leu Glu Cys Arg Glu Ala His Ile Arg Asp Val Pro Val Val Arg Leu
 1 5 10 15
 Pro Ala Asp Ser Pro Ile Pro Glu Arg Gly Asp Leu Ser Cys Arg Met
 20 25 30
 His Thr Cys Phe Asp Val Tyr Arg Cys Gly Phe Asn Pro Lys Asn Lys
 35 40 45
 Ile Lys Val Tyr Ile Tyr Ala Leu Lys Lys Tyr Val Asp Asp Phe Gly
 50 55 60
 Val Ser Val Ser Asn Thr Ile Ser Arg Glu Tyr Asn Glu Leu Leu Met
 65 70 75 80
 Ala Ile Ser Asp Ser Asp Tyr Tyr Thr Asp Asp Ile Asn Arg Ala Cys
 85 90 95
 Leu Phe Val Pro Ser Ile Asp Val Leu Asn Gln Asn Thr Leu Arg Ile
 100 105 110
 Lys Glu Thr Ala Gln Ala Met Ala Gln Leu Ser Arg Trp Asp Arg Gly
 115 120 125
 Thr Asn His Leu Leu Phe Asn Met Leu Pro Gly Gly Pro Pro Asp Tyr

619

| | | |
|---|-----|-------------|
| 130 | 135 | 140 |
| Asn Thr Ala Leu Asp Val Pro Arg Asp Arg Ala Leu Leu Ala Gly Gly | | |
| 145 | 150 | 155 160 |
| Gly Phe Ser Thr Trp Thr Tyr Arg Gln Gly Tyr Asp Val Ser Ile Pro | | |
| | 165 | 170 175 |
| Val Tyr Ser Pro Leu Ser Ala Glu Val Asp Leu Pro Glu Lys Gly Pro | | |
| | 180 | 185 190 |
| Gly Pro Arg Gln Tyr Phe Leu Leu Ser Ser Gln Val Gly Leu His Pro | | |
| | 195 | 200 205 |
| Glu Tyr Arg Glu Asp Leu Glu Ala Leu Gln Val Lys His Gly Glu Ser | | |
| | 210 | 215 220 |
| Val Leu Val Leu Asp Lys Cys Thr Asn Leu Ser Glu Gly Val Leu Ser | | |
| | 225 | 230 235 240 |
| Val Arg Lys Arg Cys His Lys His Gln Val Phe Asp Tyr Pro Gln Val | | |
| | 245 | 250 255 |
| Leu Gln Glu Ala Thr Phe Cys Val Val Leu Arg Gly Ala Arg Leu Gly | | |
| | 260 | 265 270 |
| Gln Ala Val Leu Ser Asp Val Leu Gln Ala Gly Cys Val Pro Val Val | | |
| | 275 | 280 285 |
| Ile Ala Asp Ser Tyr Ile Leu Pro Phe Ser Glu Val Leu Asp Trp Lys | | |
| | 290 | 295 300 |
| Arg Ala Ser Val Val Val Pro Glu Glu Lys Met Ser Asp Val Tyr Ser | | |
| | 305 | 310 315 320 |
| Ile Leu Gln Ser Ile Pro Gln Arg Gln Ile Glu Glu Met Gln Arg Gln | | |
| | 325 | 330 335 |
| Ala Arg Trp Phe Trp Glu Ala Tyr Phe Gln Ser Ile Lys Ala Ile Ala | | |
| | 340 | 345 350 |
| Leu Ala Thr Leu Gln Ile Ile Asn Asp Arg Ile Tyr Pro Tyr Ala Ala | | |
| | 355 | 360 365 |
| Ile Ser Tyr Glu Glu Trp Asn Asp Pro Pro Ala Val Lys Trp Gly Ser | | |
| | 370 | 375 380 |
| Val Ser Asn Pro Leu Phe Leu Pro Leu Ile Pro Pro Gln Ser Gln Gly | | |
| | 385 | 390 395 400 |
| Phe Thr Ala Ile Val Leu Thr Tyr Asp Arg Val Glu Ser Leu Phe Arg | | |

620

| | | |
|---|-----|-----|
| 405 | 410 | 415 |
| Val Ile Thr Glu Val Ser Lys Val Pro Ser Leu Ser Lys Leu Leu Val | | |
| 420 | 425 | 430 |
| Val Trp Asn Asn Gln Asn Lys Asn Pro Pro Glu Asp Ser Leu Trp Pro | | |
| 435 | 440 | 445 |
| Lys Ile Arg Val Pro Leu Lys Val Val Arg Thr Ala Glu Asn Lys Leu | | |
| 450 | 455 | 460 |
| Ser Asn Arg Phe Phe Pro Tyr Asp Glu Ile Glu Thr Glu Ala Val Leu | | |
| 465 | 470 | 475 |
| | | 480 |
| Ala Ile Asp Asp Asp Ile Ile Met Leu Thr Ser Asp Glu Leu Gln Phe | | |
| 485 | 490 | 495 |
| Gly Tyr Glu Val Trp Arg Glu Phe Pro Asp Arg Leu Val Gly Tyr Pro | | |
| 500 | 505 | 510 |
| Gly Arg Leu His Leu Trp Asp His Glu Met Asn Lys Trp Lys Tyr Glu | | |
| 515 | 520 | 525 |
| Ser Glu Trp Thr Asn Glu Val Ser Met Val Leu Thr Gly Ala Ala Phe | | |
| 530 | 535 | 540 |
| Tyr His Lys Tyr Phe Asn Tyr Leu Tyr Thr Tyr Lys Met Pro Gly Asp | | |
| 545 | 550 | 555 |
| | | 560 |
| Ile Lys Asn Trp Val Asp Ala His Met Asn Cys Glu Asp Ile Ala Met | | |
| 565 | 570 | 575 |
| Asn Phe Leu Val Ala Asn Val Thr Gly Lys Ala Val Ile Lys Val Thr | | |
| 580 | 585 | 590 |
| Pro Arg Lys Lys Phe Lys Cys Pro Glu Cys Thr Ala Ile Asp Gly Leu | | |
| 595 | 600 | 605 |
| Ser Leu Asp Gln Thr His Met Val Glu Arg Ser Glu Cys Ile Asn Lys | | |
| 610 | 615 | 620 |
| Phe Ala Ser Val Phe Gly Thr Met Pro Leu Lys Val Val Glu His Arg | | |
| 625 | 630 | 635 |
| | | 640 |
| Ala Asp Pro Val Leu Tyr Lys Asp Asp Phe Pro Glu Lys Leu Lys Ser | | |
| 645 | 650 | 655 |
| Phe Pro Asn Ile Gly Ser Leu | | |
| 660 | | |